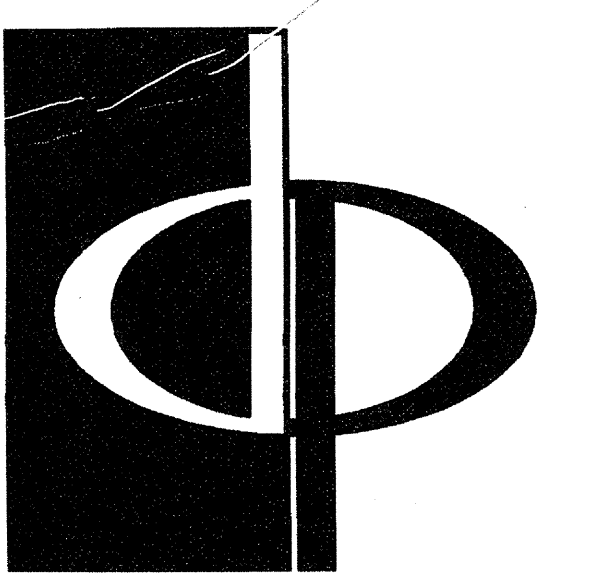
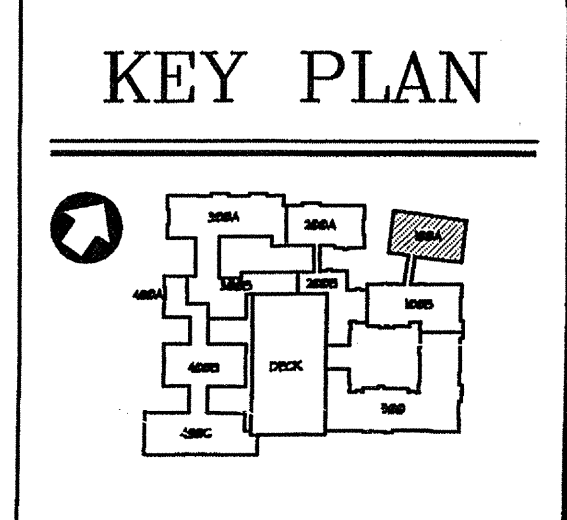


HVAC EQUIPMENT SCHEDULES ARE ON
DETAIL SHEETS H6.1 THRU H6.4.

BUILDING 100A - LEVEL THREE - HVAC PLAN
SCALE: 1/8" = 1'-0" 07/03-H-BLDG-100



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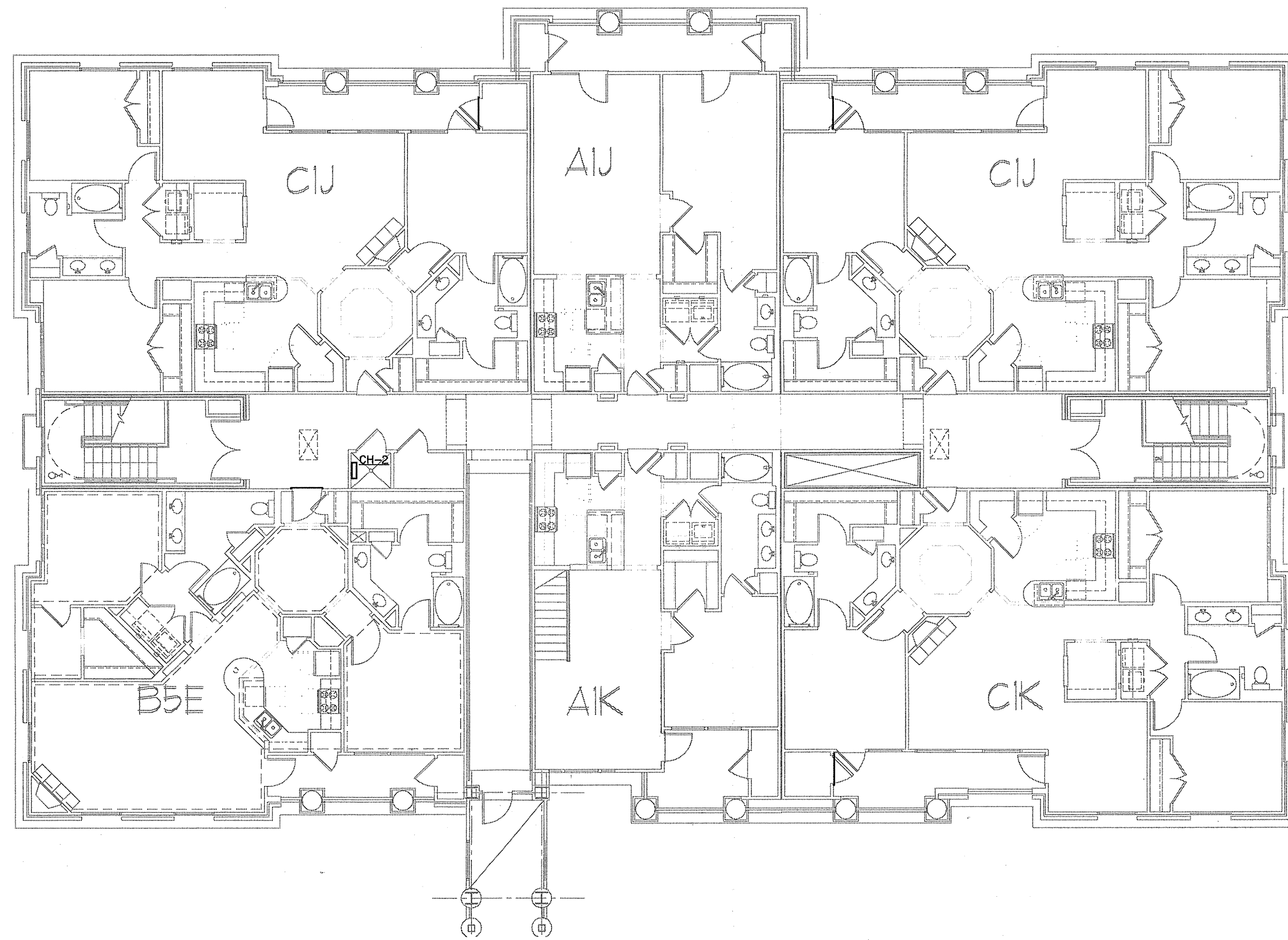
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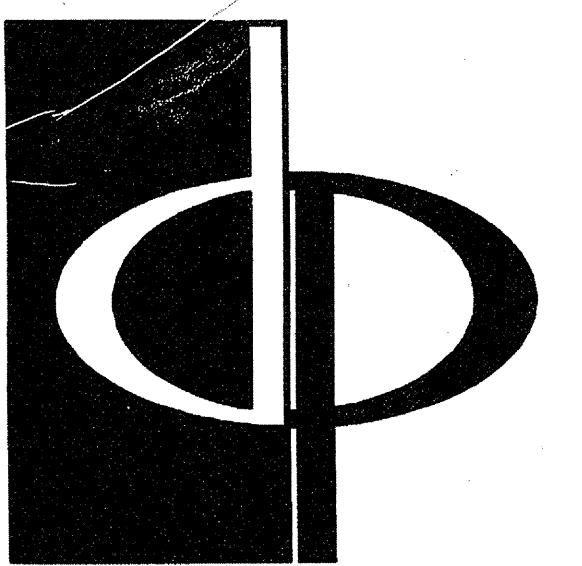
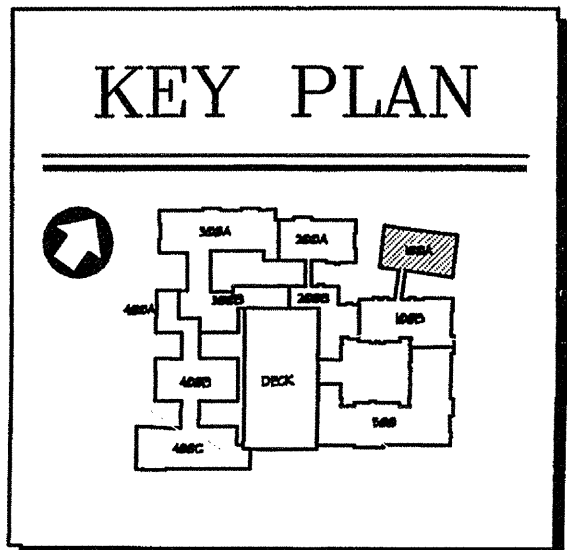
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DATE: 06/18/03
JOB NUMBER: 021108
DRAWN BY: GHK
CHECKED BY: GHK
DRAWING TITLE: BUILDING 100A - LEVEL THREE HVAC PLAN
DRAWING NUMBER: H-13
COMMENTS:



HVAC EQUIPMENT SCHEDULES ARE ON
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BUILDING 100A - LEVEL FOUR - HVAC PLAN
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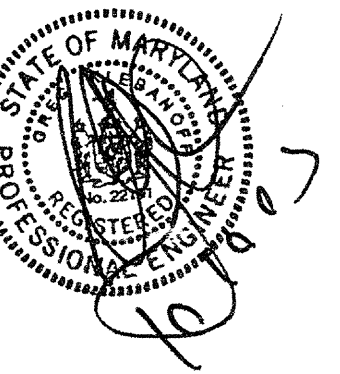
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DATE: 06/10/02

JOB NUMBER: 021108

DRAWN BY: GHK

CHECKED BY: GHK

DRAWING TITLE: GHK

BUILDING 100A - LEVEL FOUR

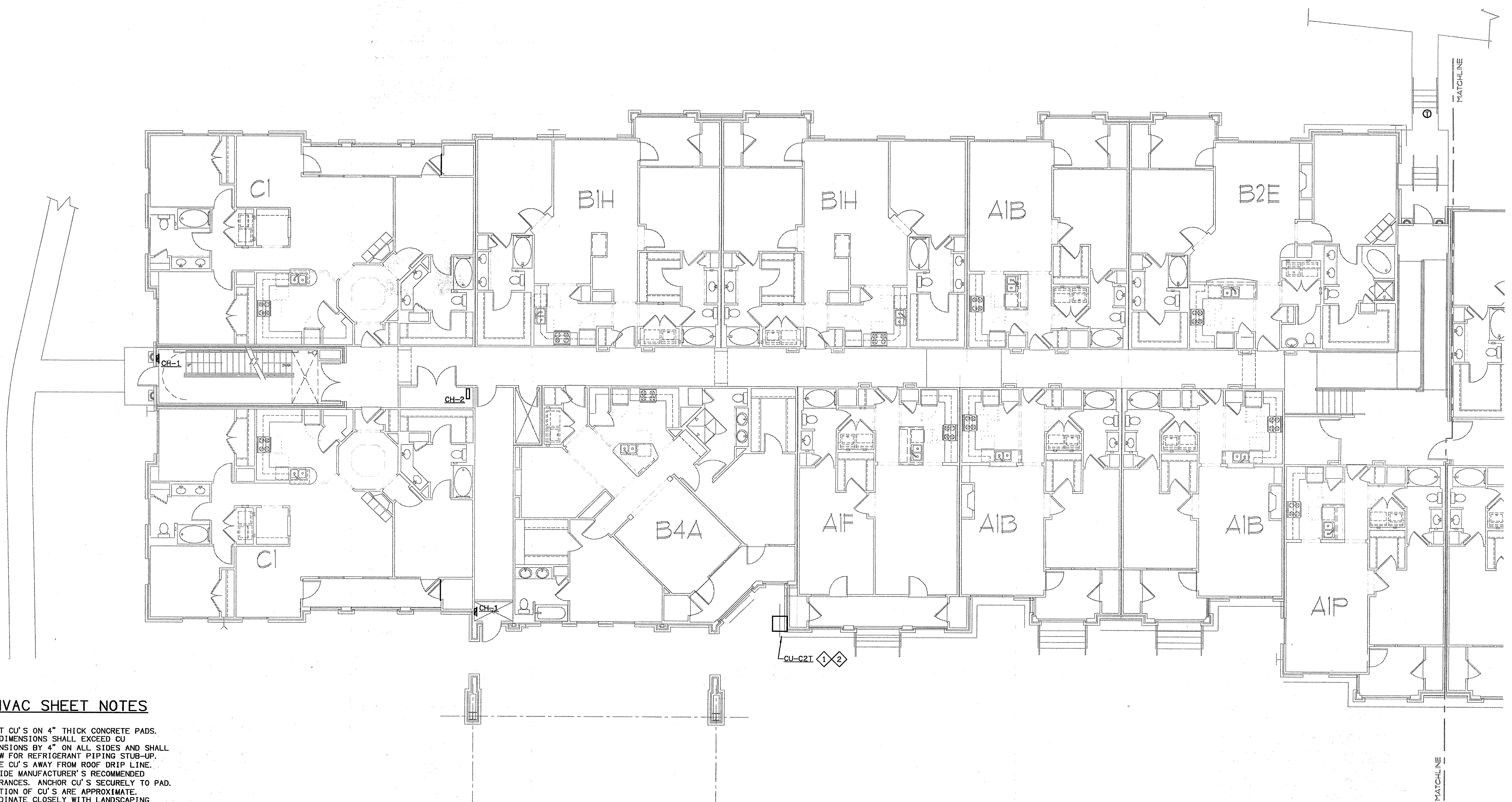
HYAC PLAN

DRAWING NUMBER: H-1.4

COMMENTS:

H-1.4

COMMENTS:

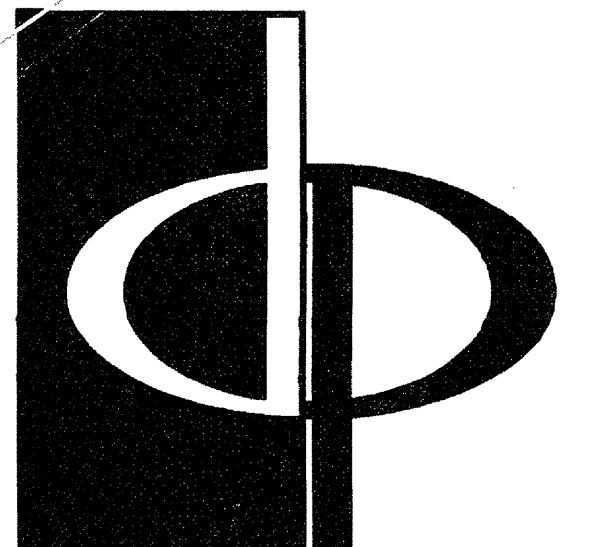
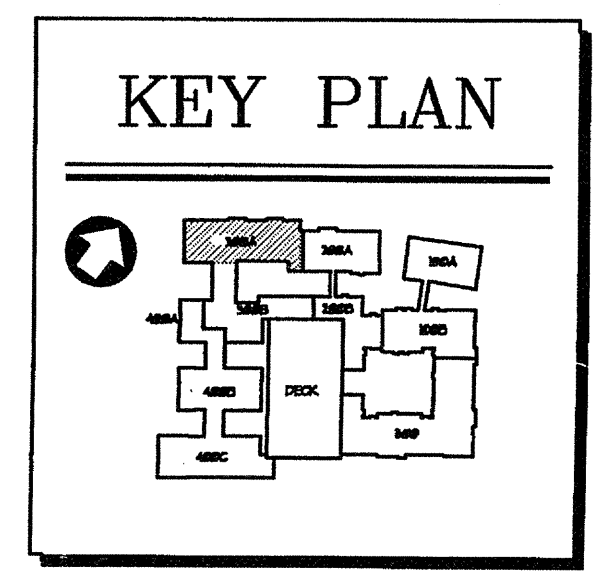


HVAC SHEET NOTES

- ◆ MOUNT CU'S ON 4" THICK CONCRETE PADS. PAD DIMENSIONS SHALL EXCEED CU DIMENSIONS BY 4" ON ALL SIDES AND SHALL ALLOW FOR REFRIGERANT PIPING STUB-UP. PLACE CU'S AWAY FROM ROOF DRIP LINE. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES. ANCHOR CU'S SECURELY TO PAD. LOCATION OF CU'S ARE APPROXIMATE. COORDINATE CLOSELY WITH LANDSCAPING PLANS AND ARCHITECTURAL DETAILS.
- ◆ WHEN REFRIGERANT LINE RUNS EXCEED 50 EQUIVALENT FEET, SIZE REFRIGERANT LINES PER CU MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIC LENGTH INVOLVED. ALSO PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER. IF USING THE BASIS OF DESIGN CARRIER CU, FOLLOW THE RECOMMENDATIONS IN CARRIER'S LONG LINE APPLICATION GUIDELINE FORM 38-4XA INCLUDING 3/4" SUCTION LINE, 3/8" LIQUID LINE, CRANKCASE HEATER, LIQUID LINE SOLENOID, AND INVERTED SUCTION LINE TRAP. IF THE SUBMITTED MANUFACTURER MAKES NO RECOMMENDATIONS FOR LONG REFRIGERANT LINE RUNS, CHOOSE ANOTHER CU MANUFACTURER.

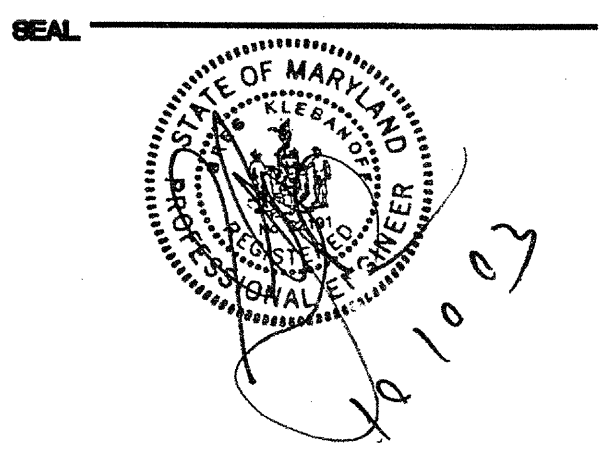
BUILDING 300A - LEVEL ONE - HVAC PLAN
 SCALE: 1/8" = 1'-0"
 07/09-H-BLDG-100

HVAC EQUIPMENT SCHEDULES ARE ON
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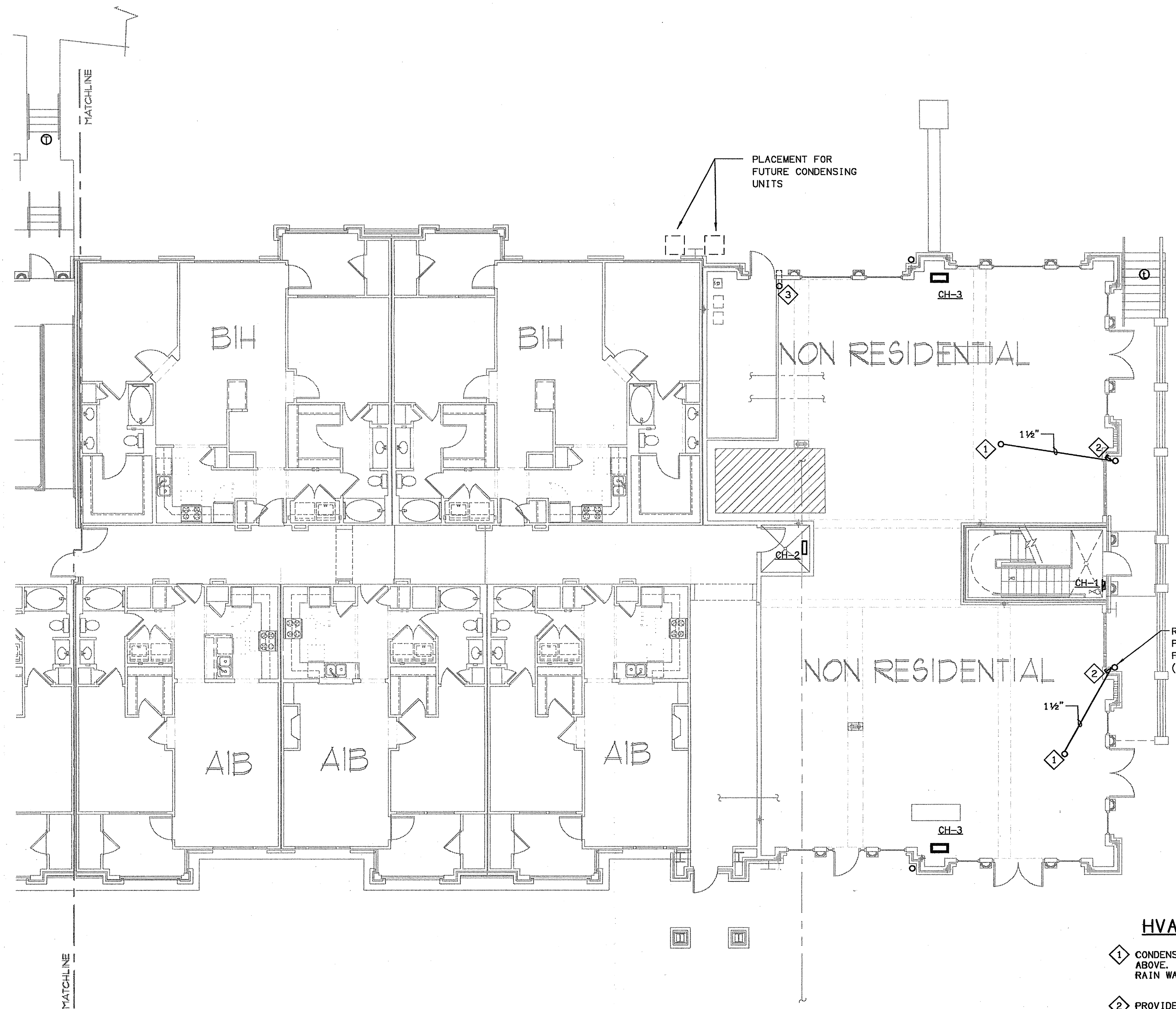
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REVISIONS
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DATE 06/10/02
JOB NUMBER 021102
DRAWN BY GHK
CHECKED BY GHK
DRAWING TITLE GHK
BUILDING 300A - LEVEL ONE HVAC PLAN
DRAWING NUMBER H-1.6
COMMENTS

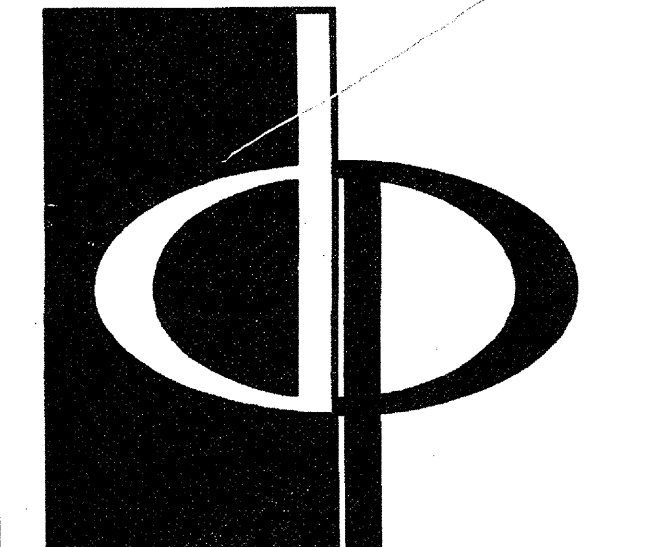
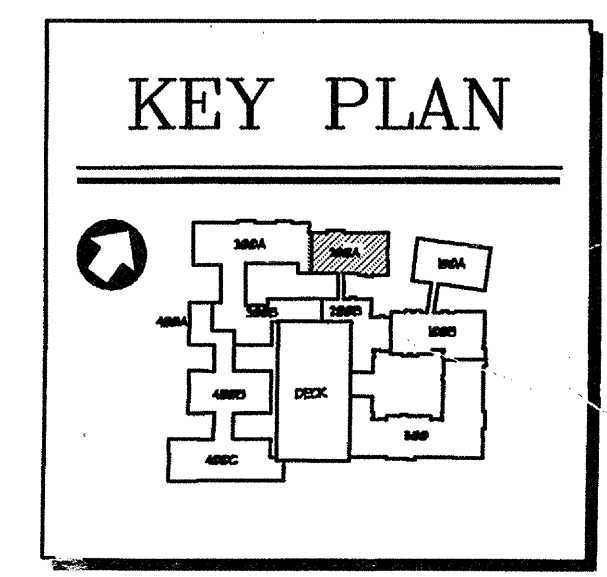


1 BUILDING 200A - LEVEL ONE - HVAC PLAN
 H-11 SCALE: 1/8" = 1'-0" ©2003-H-BLDG-200

HVAC SHEET NOTES

- 1 CONDENSATE DRAIN FROM APARTMENT ABOVE. ROUTE TIGHT TO CEILING TO RAIN WATER LEADER.
- 2 PROVIDE A CAPPED TURNED UP INLINE "1" AT A LOWER POINT THAN CEILING LEVEL TO ACCOMMODATE PROPER DRAINAGE OF FUTURE CONDENSATE FROM RETAIL AREA AIR HANDLERS.
- 3 PROVIDE A CAPPED 6" PVC CONDUIT CHASE TO THE OUTSIDE. TURN UP AT SLAB, TERMINATE BELOW GRADE JUST BEYOND FOOTER CLOSE TO THE PLACEMENT OF THE FUTURE CONDENSING UNITS TO ACCOMMODATE REFRIGERANT LINES TO FUTURE AIR HANDLING UNITS.

HVAC EQUIPMENT SCHEDULES ARE ON
 DETAIL SHEETS HB. 1 THRU HB. 4.



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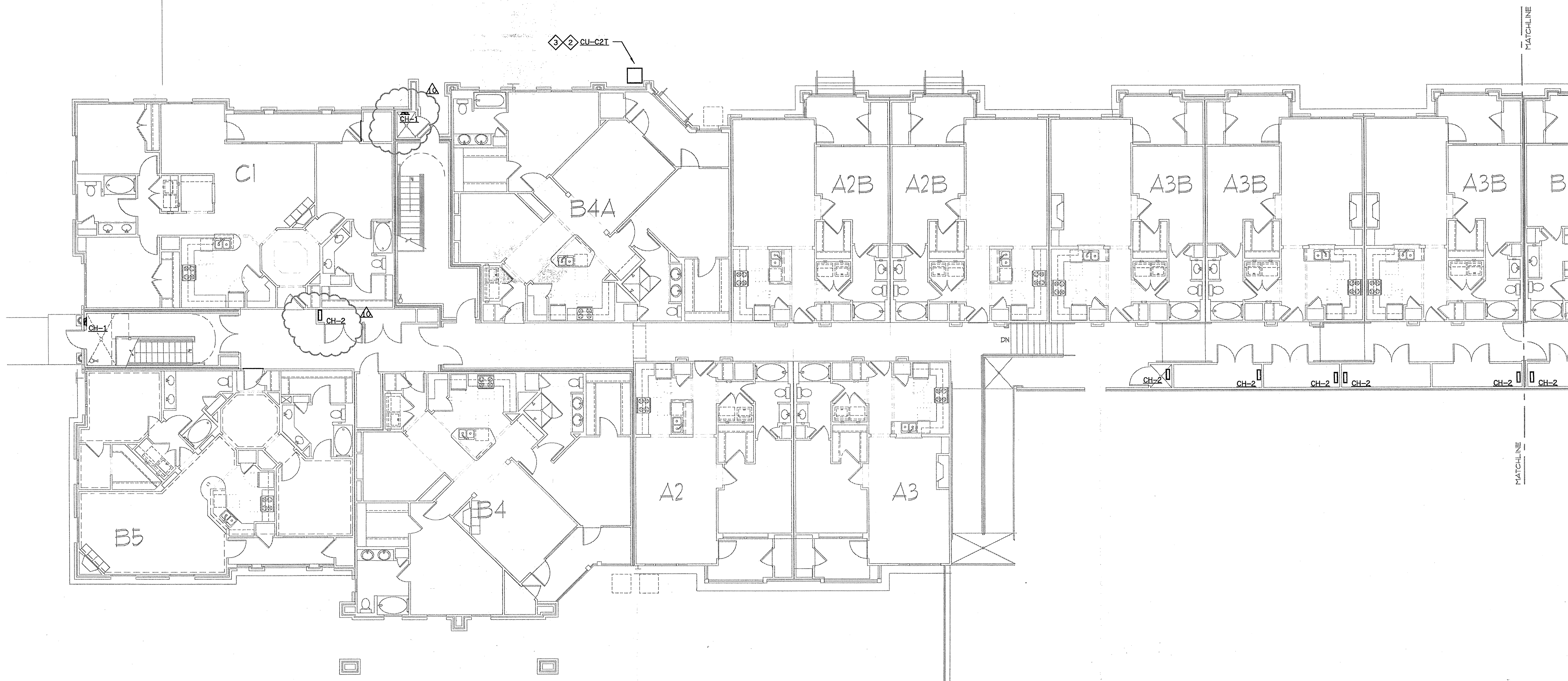
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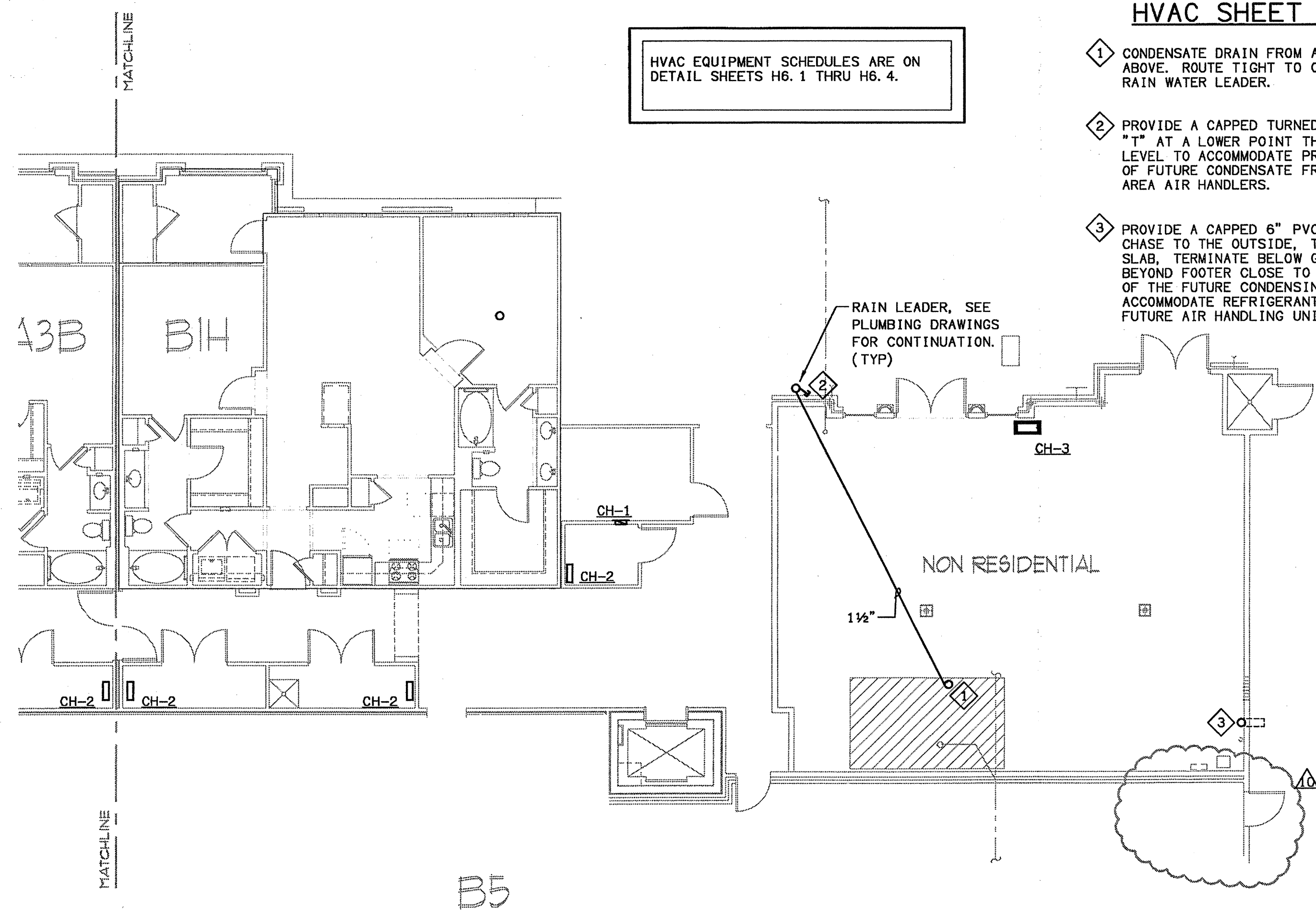
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DATE	06/10/02
JOB NUMBER	021102
DRAWN BY	GJK
CHECKED BY	GJK
DRAWING TITLE	BUILDING 200A - LEVEL ONE HVAC PLAN
DRAWING NUMBER	H-11
COMMENTS	

DATE: 06/10/02
 JOB NUMBER: 021102
 DRAWN BY: GJK
 CHECKED BY: GJK
 DRAWING TITLE: BUILDING 200A - LEVEL ONE HVAC PLAN
 DRAWING NUMBER: H-11
 COMMENTS:



1 BUILDING 300B & 400A - LEVEL ONE - HVAC PLAN
 SCALE: 1/8" = 1'-0"
 02109-H-BLDG-300B



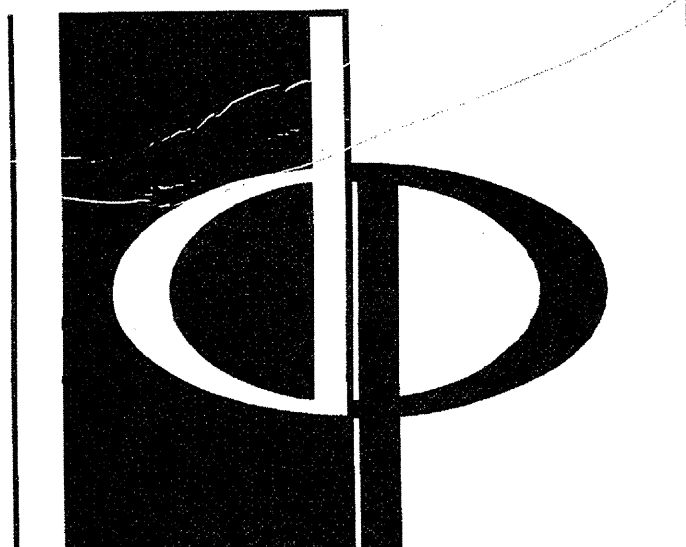
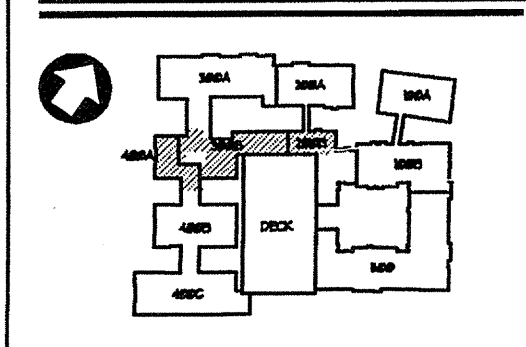
2 BUILDING 300B - LEVEL ONE - HVAC PLAN
 SCALE: 1/8" = 1'-0"
 02109-H-BLDG-300B

HVAC EQUIPMENT SCHEDULES ARE ON
 DETAIL SHEETS HG. 1 THRU HG. 4.

HVAC SHEET NOTES

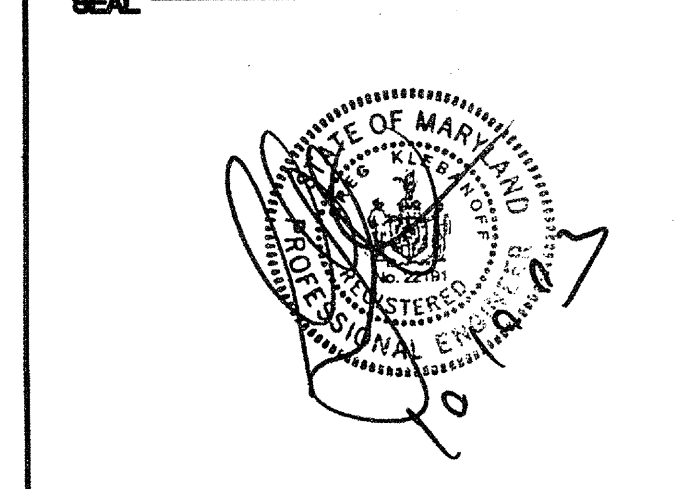
- 1 CONDENSATE DRAIN FROM APARTMENT ABOVE. ROUTE TIGHT TO CEILING TO RAIN WATER LEADER.
- 2 PROVIDE A CAPPED TURNED UP INLINE "T" AT A LOWER POINT THAN CEILING LEVEL TO ACCOMMODATE PROPER DRAINAGE OF FUTURE CONDENSATE FROM RETAIL AREA AIR HANDLERS.
- 3 PROVIDE A CAPPED 6" PVC CONDUIT CHASE TO THE OUTSIDE. TURN UP AT SLAB. TERMINATE BELOW GRADE JUST BEYOND FOOTER CLOSE TO THE PLACEMENT OF THE FUTURE CONDENSING UNITS TO ACCOMMODATE REFRIGERANT LINES TO FUTURE AIR HANDLING UNITS.

KEY PLAN



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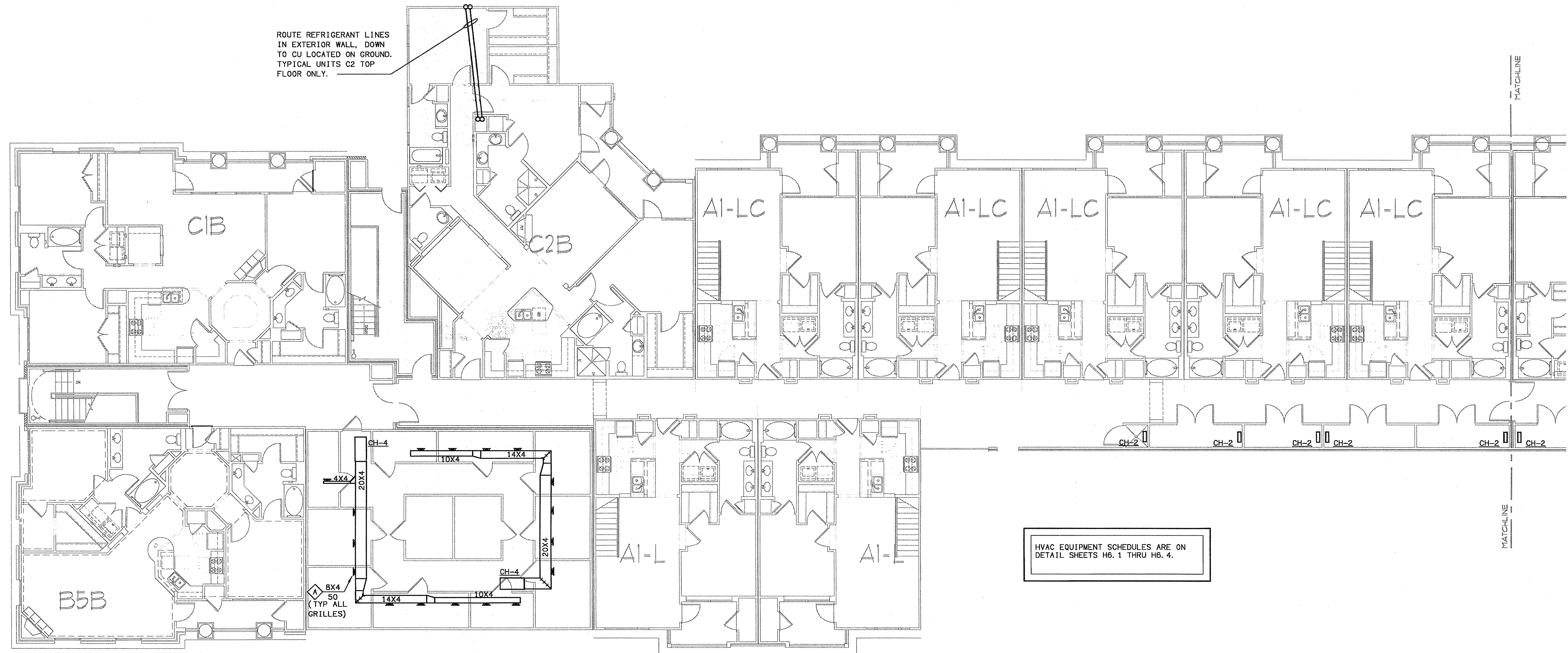


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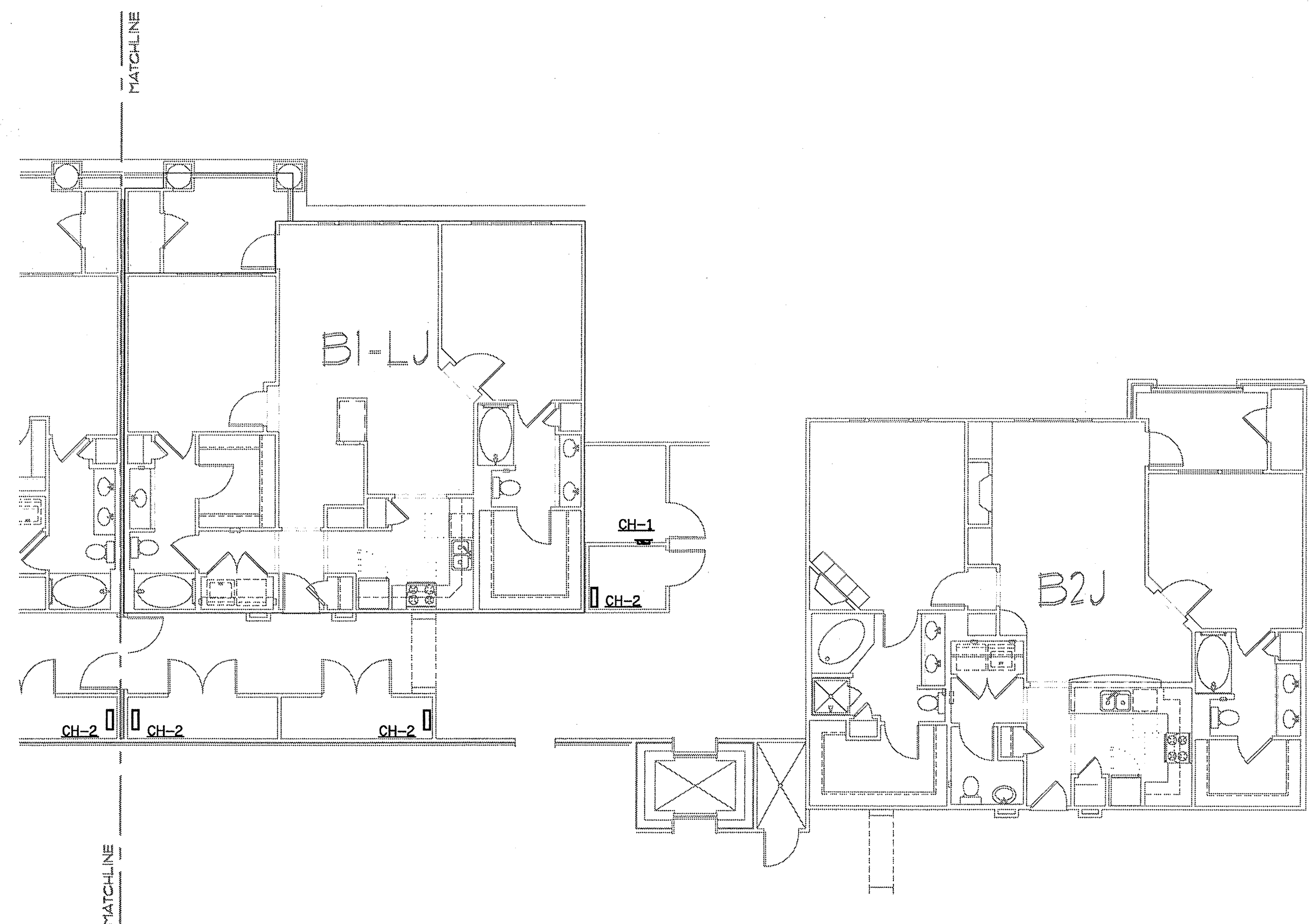
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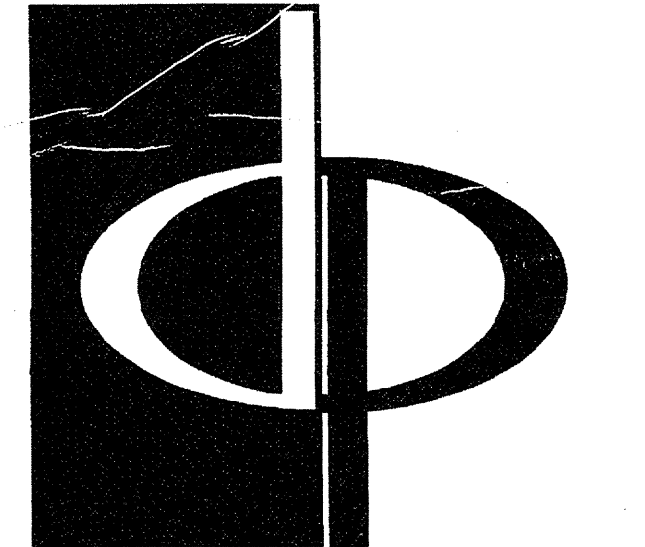
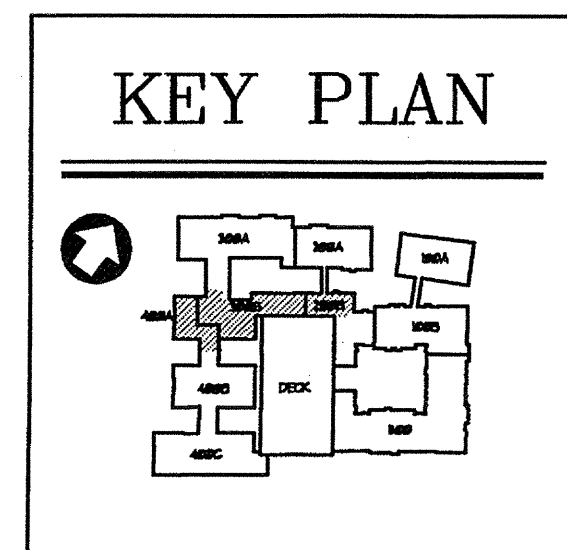
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 DRAWING NUMBER: H-1.16
 COMMENTS:



1 BUILDING 300B & 400A - LEVEL FOUR - HYAC PLAN
 SCALE: 1/8" = 1'-0"
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2 BUILDING 200B - LEVEL FOUR - HYAC PLAN
 SCALE: 1/8" = 1'-0"
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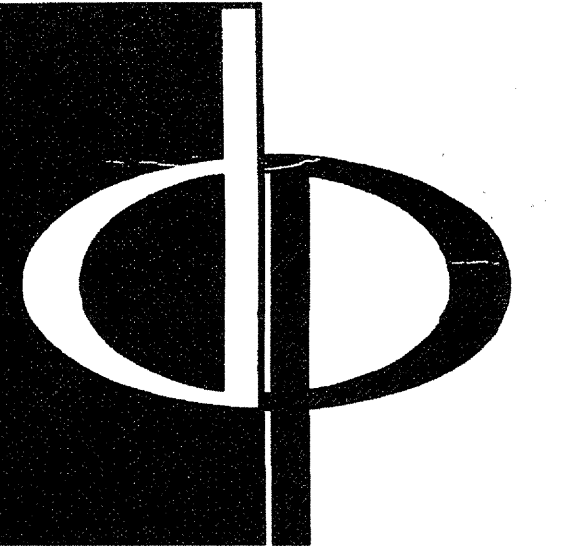
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BUILDING 200B, 300B & 400A - LEVEL FOUR
 HYAC PLAN

DRAWING NUMBER

H-119

COMMENTS

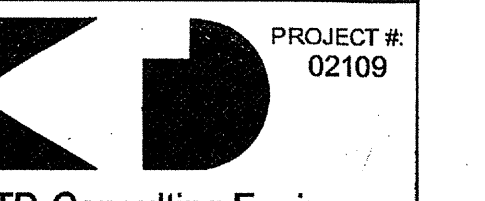


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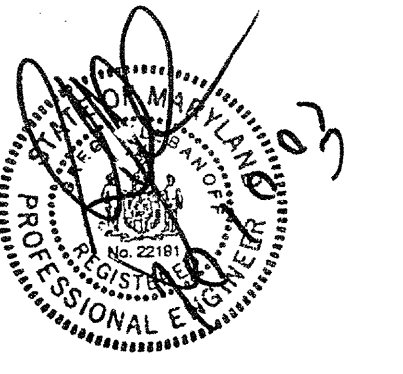
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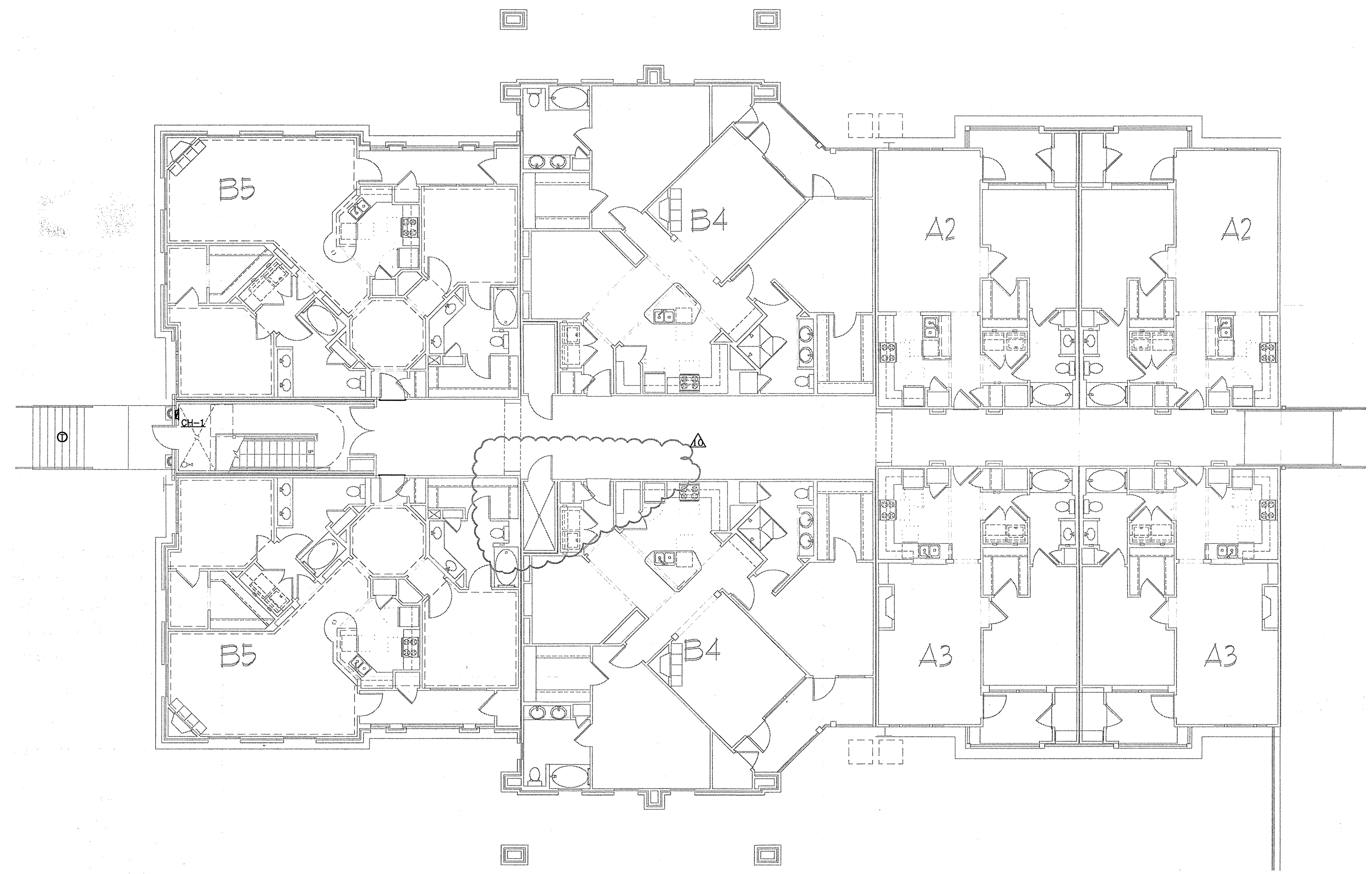
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DRAWING TITLE BUILDING 400B - LEVEL ONE HVAC PLAN

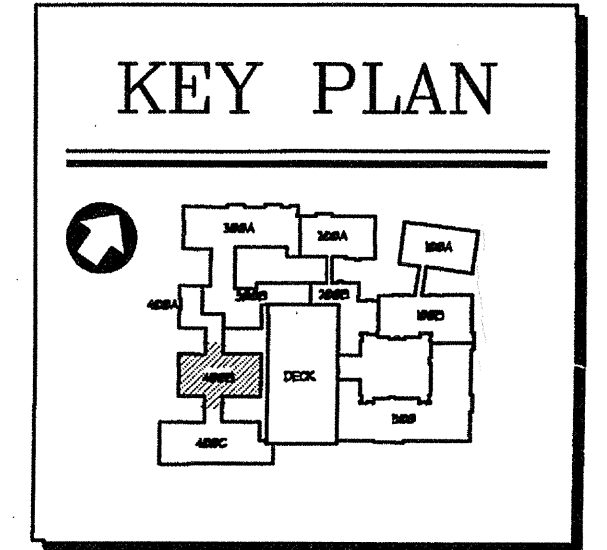
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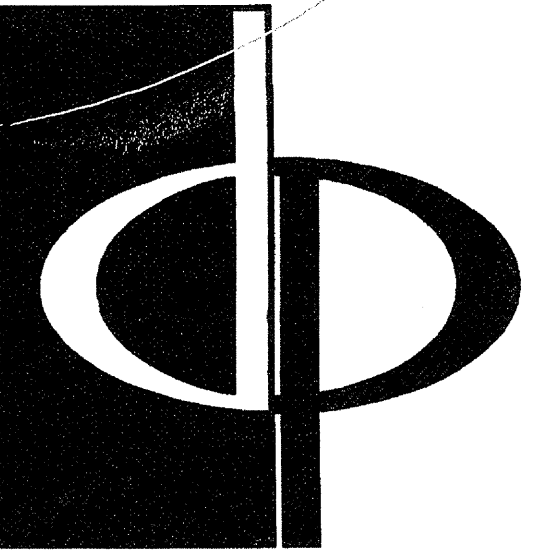
COMMENTS



HVAC EQUIPMENT SCHEDULES ARE ON
DETAIL SHEETS HS. 1 THRU HS. 4.

1 BUILDING 400B - LEVEL ONE - HVAC PLAN
SCALE: 1/8" = 1'-0"
02109-H-PL-02-400



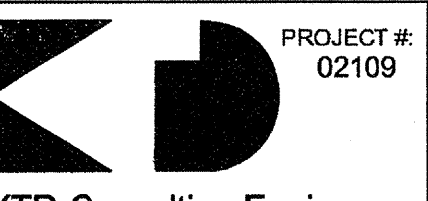


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JOB NUMBER 021102

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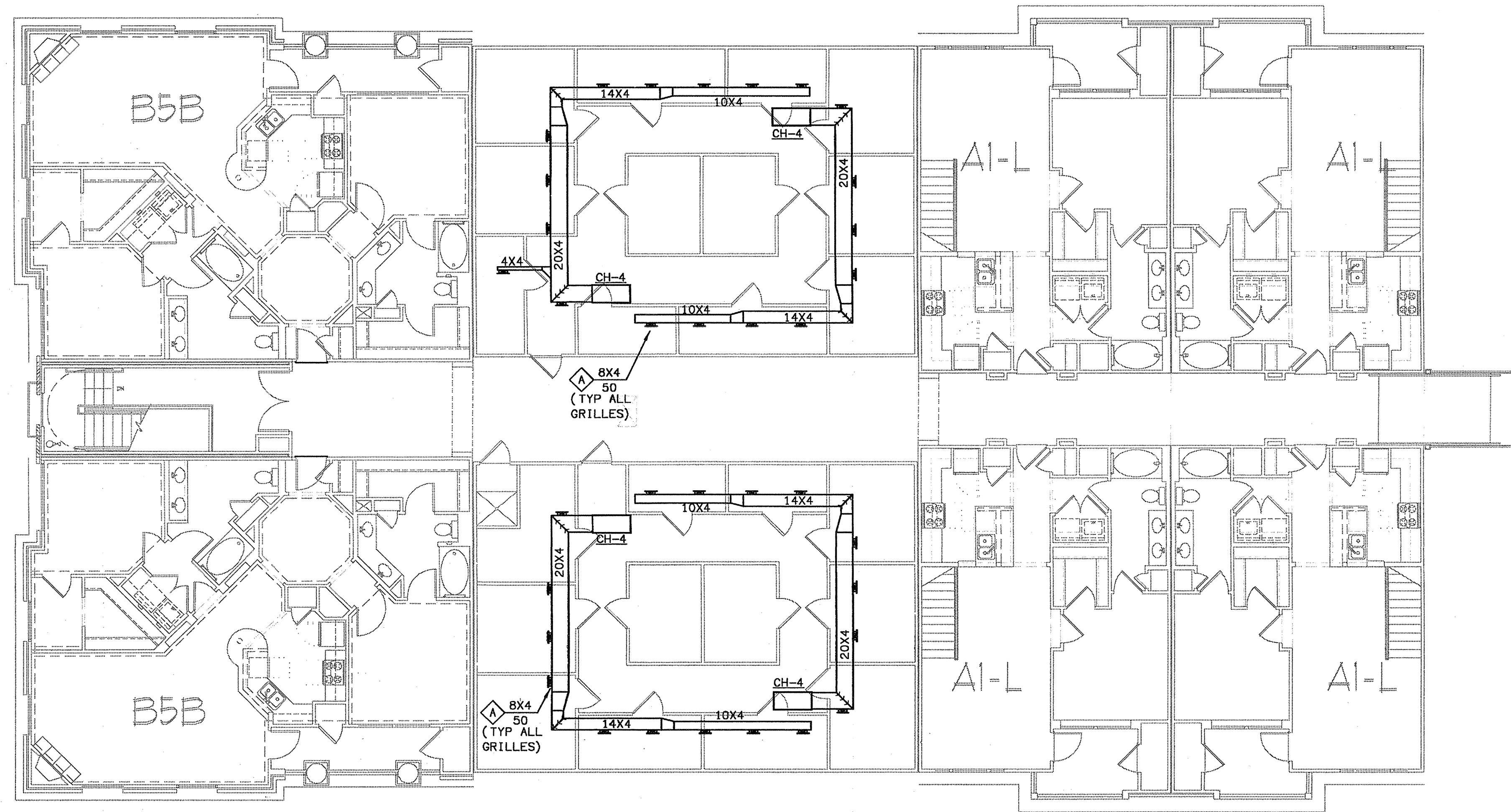
BUILDING 400B - LEVEL FOUR

HYAC PLAN

DRAWING NUMBER

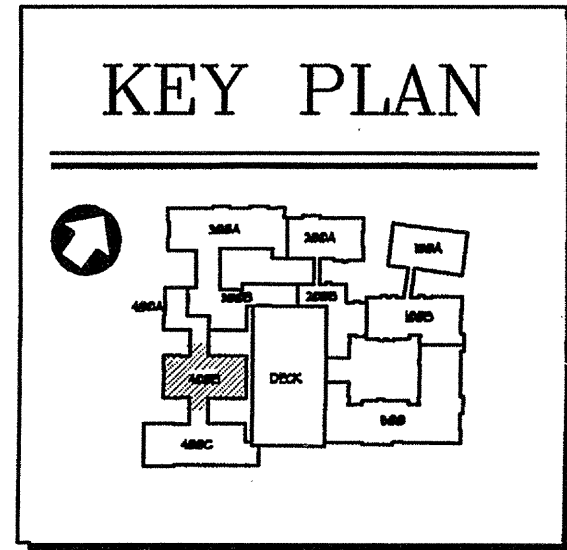
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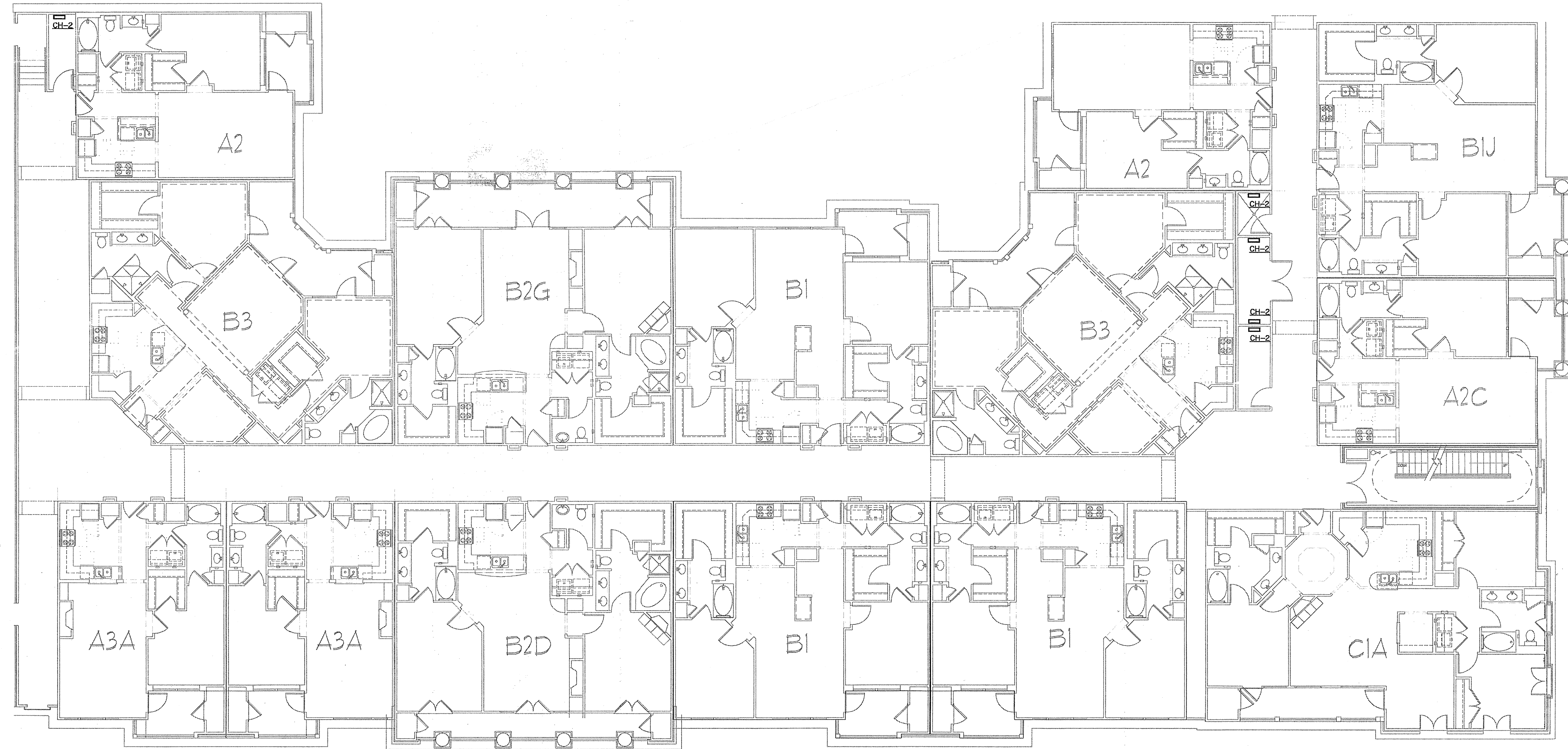
COMMENTS



H-124 BUILDING 400B - LEVEL FOUR - HYAC PLAN
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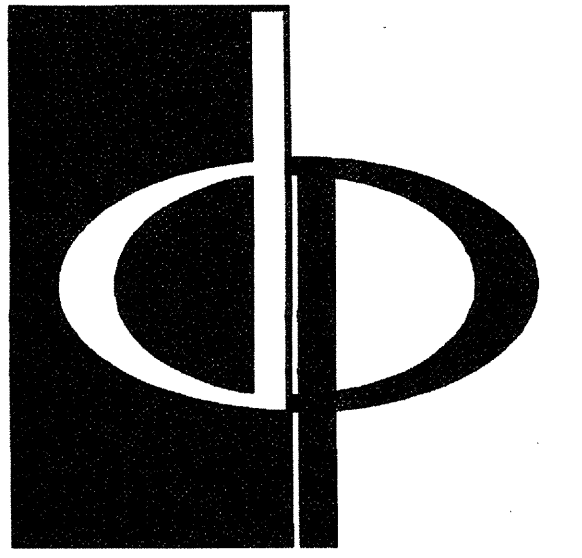
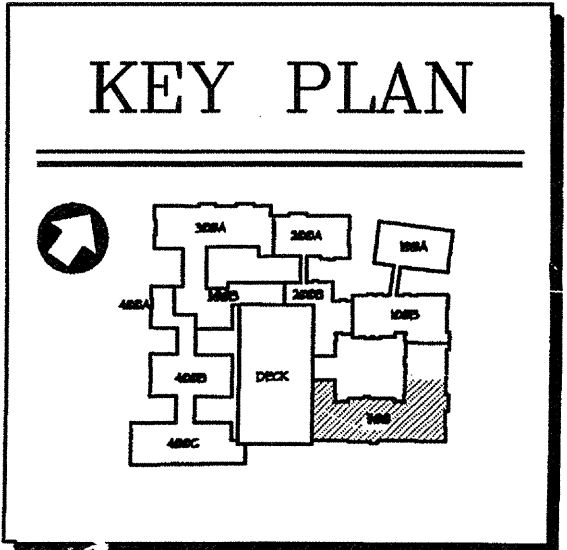
HYAC EQUIPMENT SCHEDULES ARE ON
DETAIL SHEETS H6.1 THRU H6.4.





BUILDING 500 - LEVEL THREE - HVAC PLAN
 SCALE: 1/8" = 1'-0" 07/18/03-H-BLDG-600

HVAC EQUIPMENT SCHEDULES ARE ON
 DETAIL SHEETS H6.1 THRU H6.4.

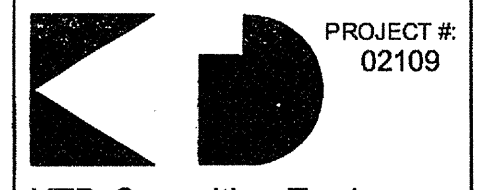


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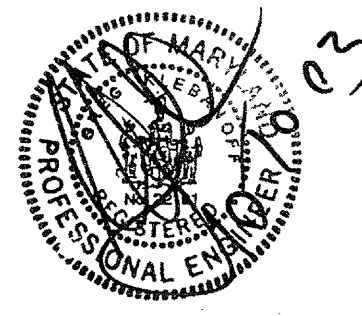
CONSULTANT



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DATE

JOB NUMBER 0610102

DRAWN BY 021108

CHECKED BY GHK

DRAWING TITLE GHK

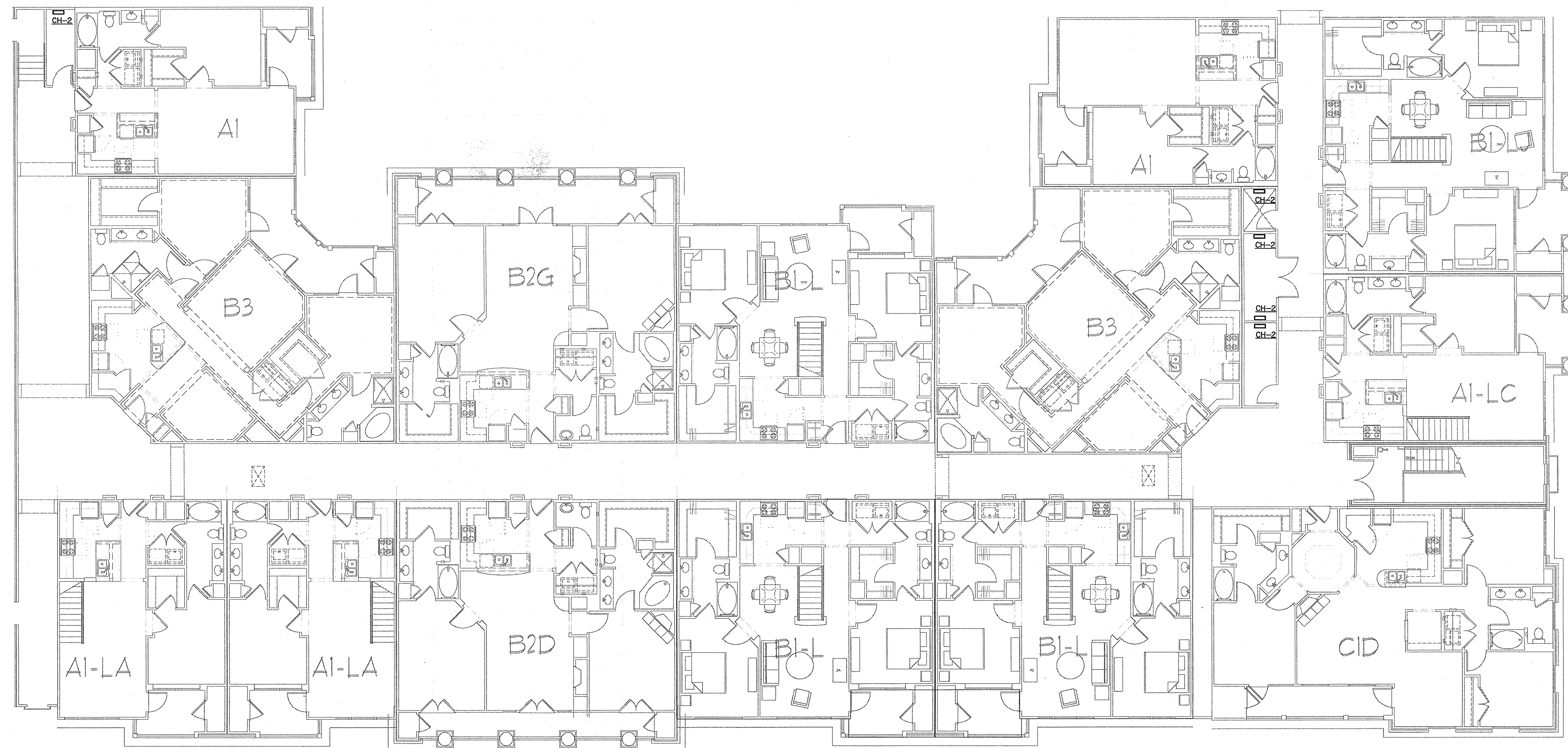
BUILDING 500 - LEVEL THREE

HYAC PLAN

DRAWING NUMBER

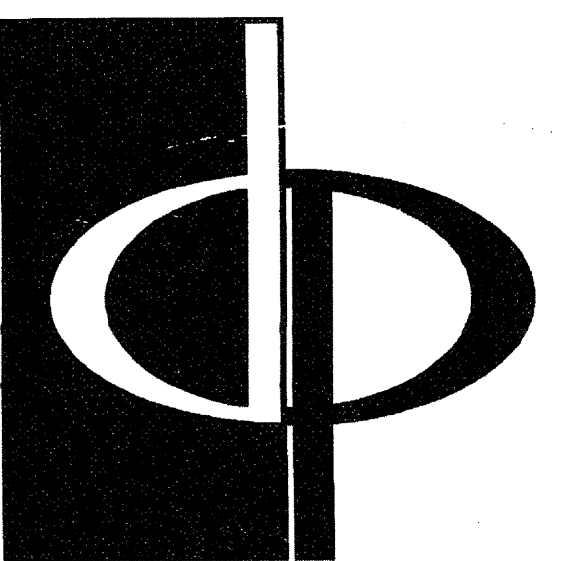
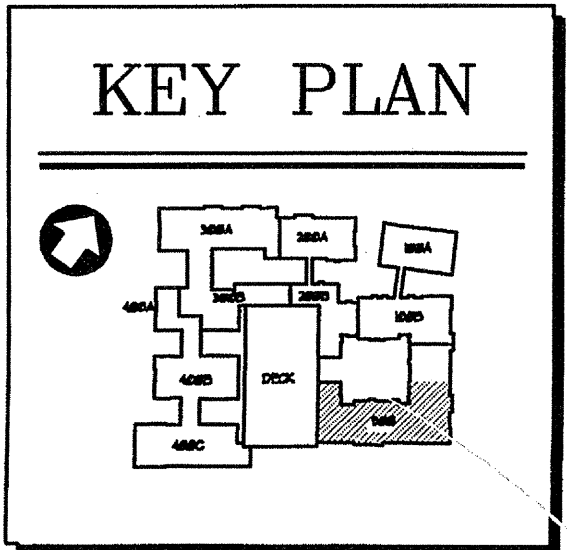
H-134

COMMENTS



BUILDING 500 - LEVEL FOUR - HVAC PLAN
H-135 SCALE 1/8" = 1'-0" 0718-11-BLDG-600

HVAC EQUIPMENT SCHEDULES ARE ON
 DETAIL SHEETS H6.1 THRU H6.4.

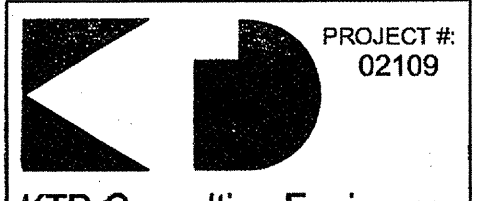


THE PRESTON PARTNERSHIP, LLC
 A MULTI-DISCIPLINARY DESIGN FIRM

1000 ABERNATHY ROAD NE, SUITE 600
 ATLANTA, GEORGIA 30328
 TELEPHONE: 770 396 7248
 FAX: 770 396 2945

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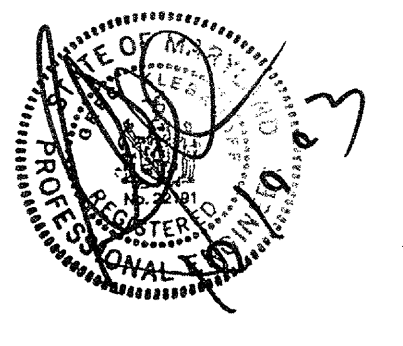
CONSULTANT



KTD Consulting Engineers
 ALTAMONTE SPRINGS, FL
 237 S. WESTMONTE DR.
 PH. 407.834.7900

FAIRFAX, VA
 9640 MAIN STREET
 PH: 703.338.2889

SEAL



I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER: 00000000000000000000000000000000

PROJECT

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 KENTLANDS**

MARYLAND

FOR

**ARCHSTONE
 COMMUNITIES**
 Six Piedmont Center, Suite 600
 Atlanta, Georgia 30305
 404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/07/02

JOB NUMBER 0211102

DRAWN BY GJK

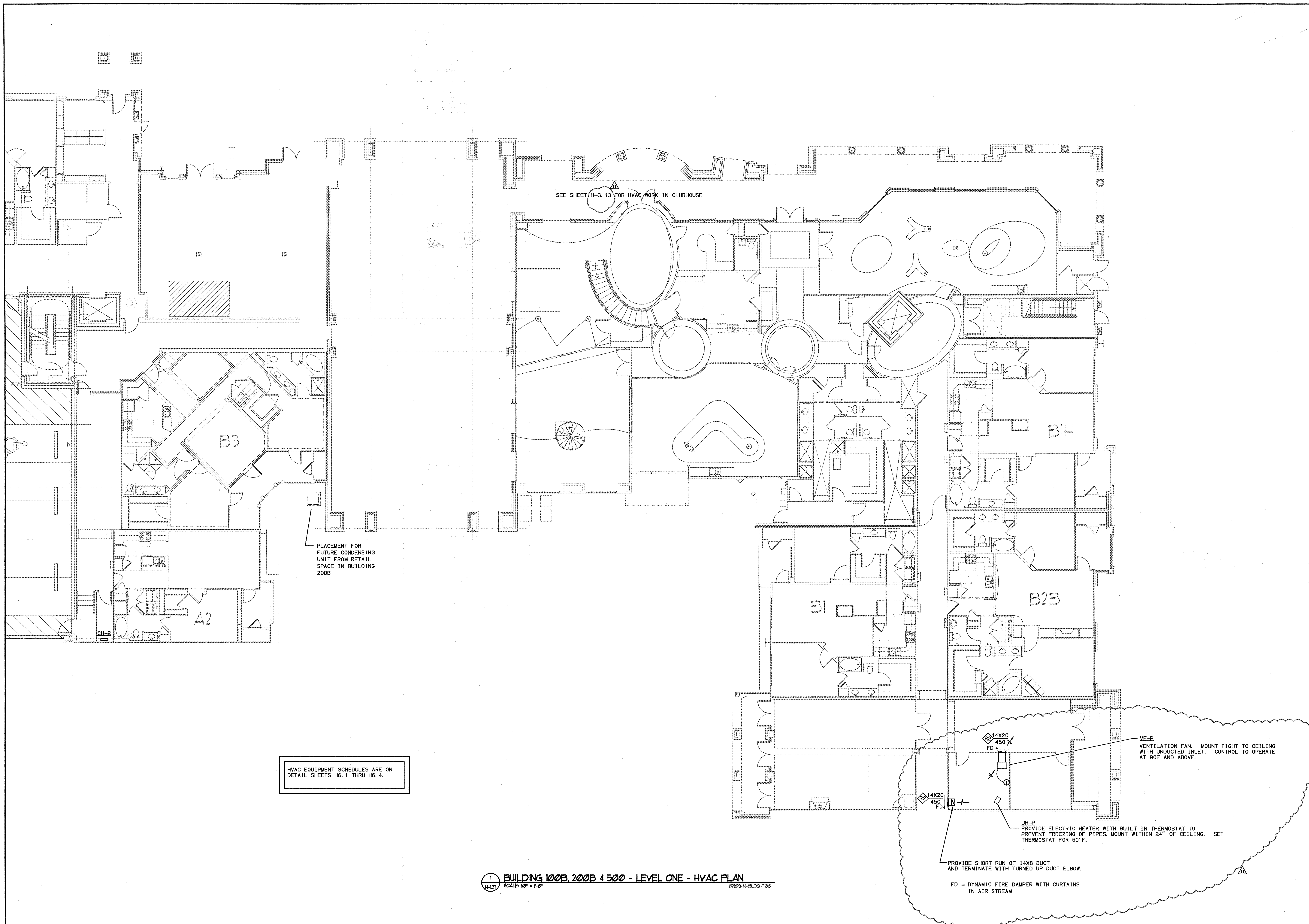
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DRAWING TITLE BUILDING 500 - LEVEL FOUR

HYAC PLAN

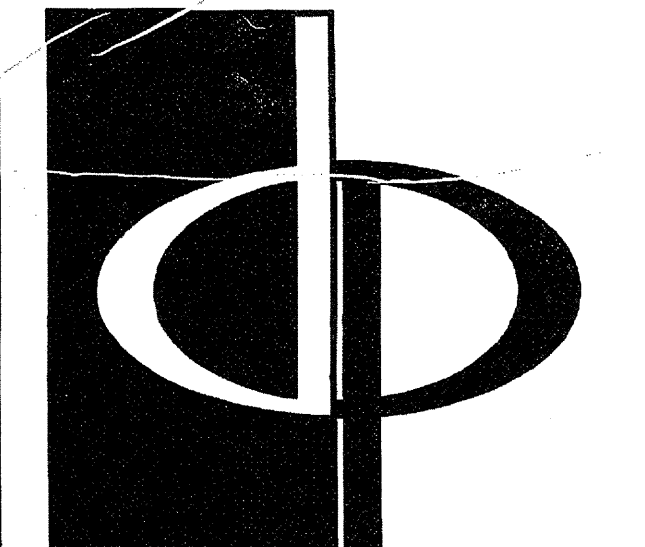
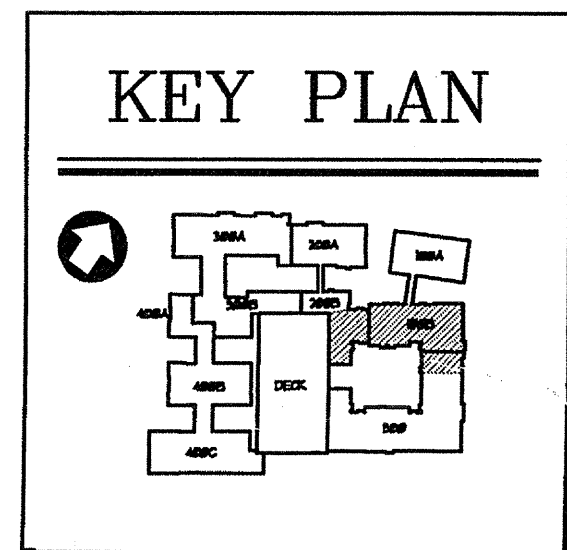
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COMMENTS




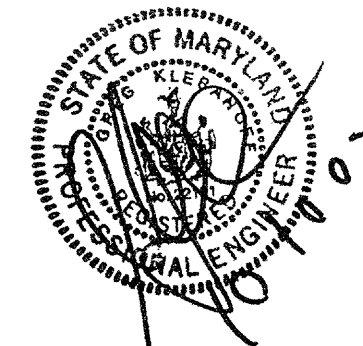
HVAC EQUIPMENT SCHEDULES ARE ON
DETAIL SHEETS H6.1 THRU H6.4.

BUILDING 100B, 200B # 500 - LEVEL ONE - HVAC PLAN
H-137 SCALE: 1/8" = 1'-0" 02/03-11-BLDG-100

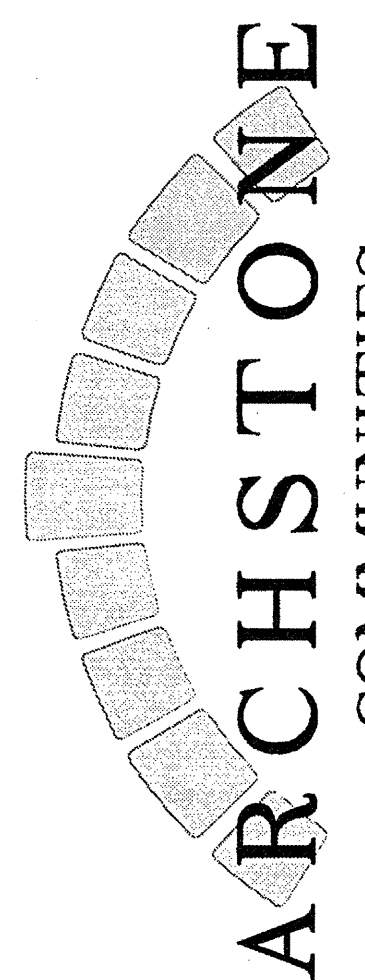


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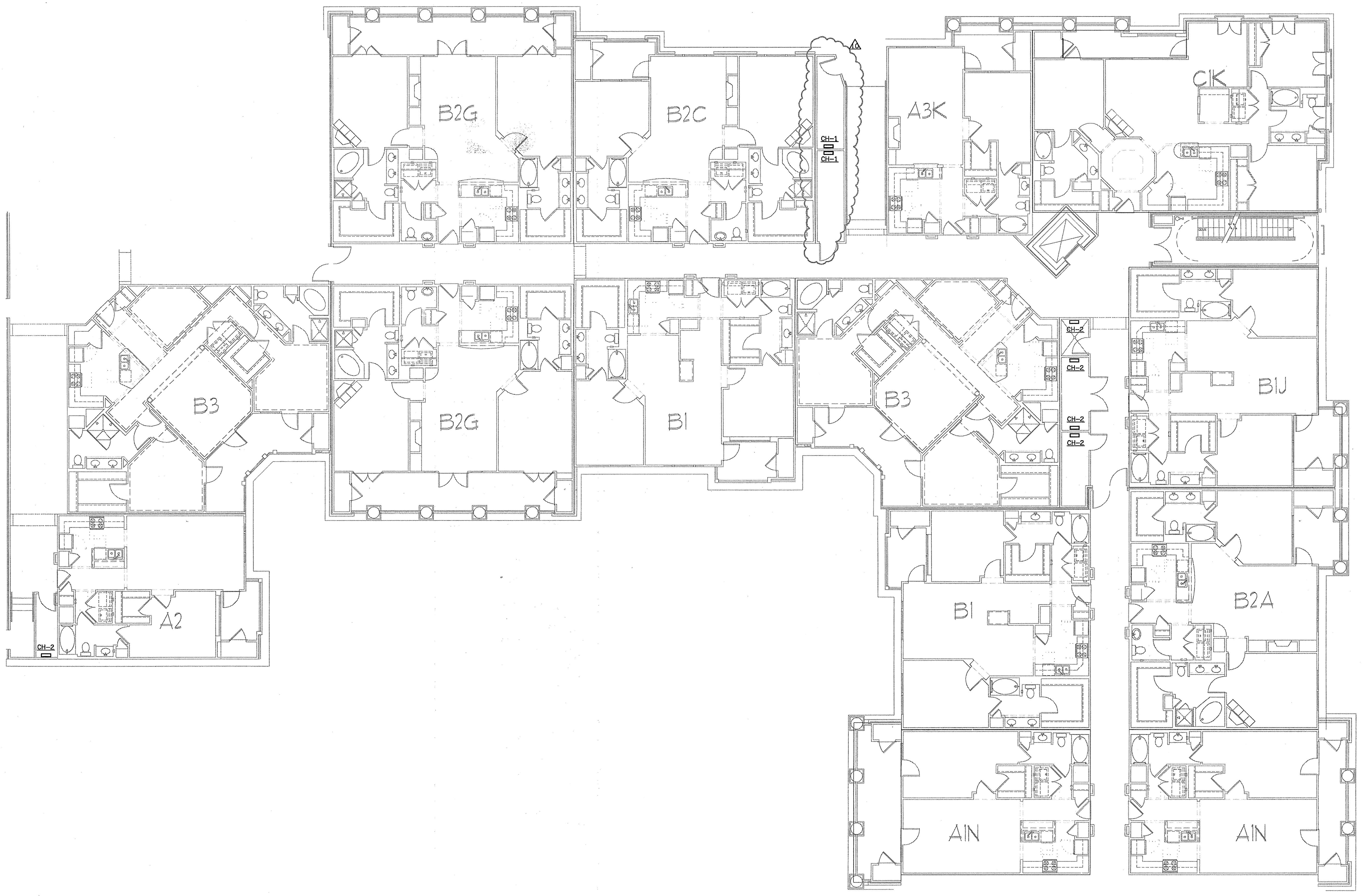
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LEGIBILITY: THESE DOCUMENTS WERE PREPARED ON APPROVAL BY ME, AND I AM AN ARCHITECT LICENSED UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER: 0948 EXPIRATION DATE: SEPTEMBER 3, 2004.

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 COMMUNITIES
 Six Piedmont Center, Suite 600
 Atlanta, Georgia, 30305
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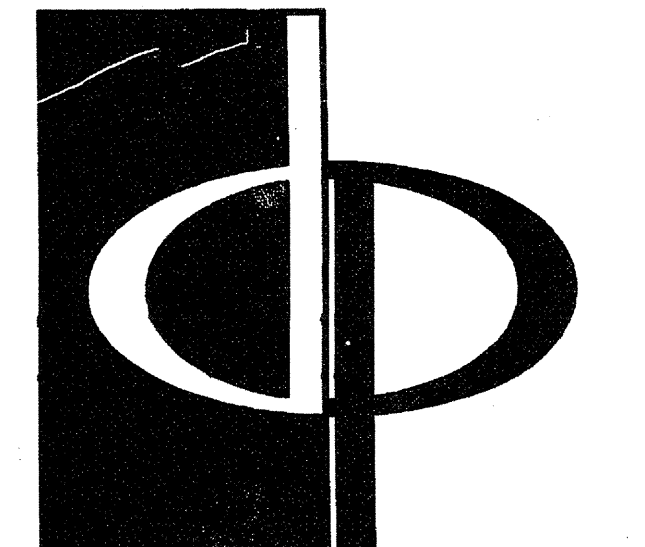
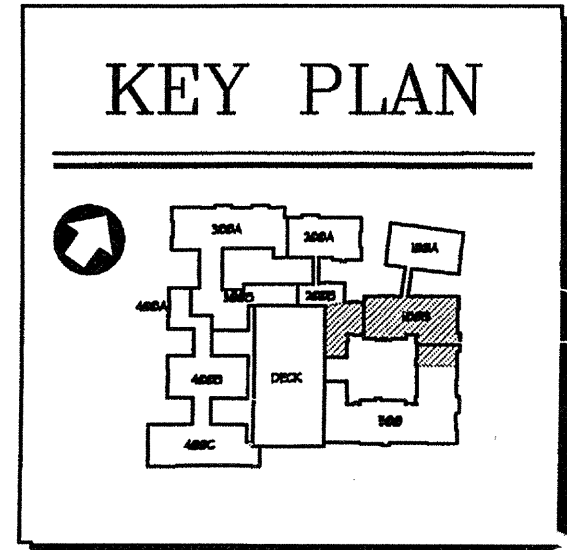
REVISIONS
 07/18/03 RELEASED FOR CONSTRUCTION
 09/15/03 AMENITY AREA REVISION

DATE 06/10/02
JOB NUMBER 021102
DRAWN BY GJK
CHECKED BY GJK
DRAWING TITLE GJK
BUILDING 100B, 200B # 500 - LEVEL ONE
HVAC PLAN
DRAWING NUMBER H-137
COMMENTS



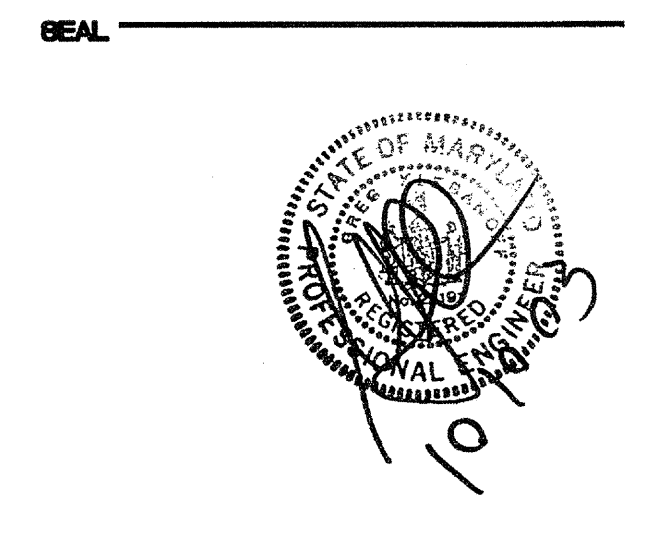
BUILDING 100B, 200B & 500 - LEVEL THREE - HVAC PLAN
 SCALE: 1/8" = 1'-0" 02/09-H-BLDG-100

HVAC EQUIPMENT SCHEDULES ARE ON
 DETAIL SHEETS H6.1 THRU H6.4.



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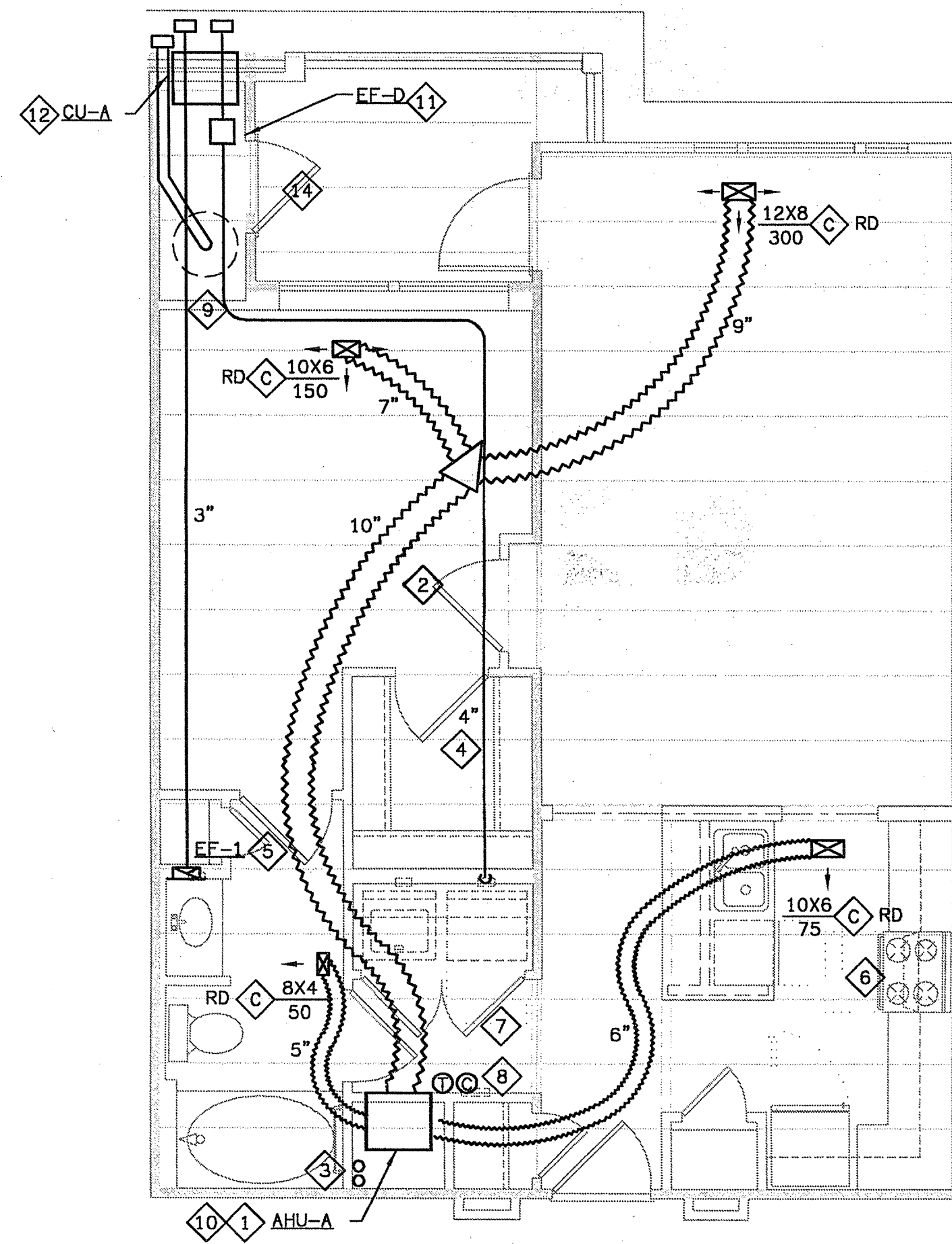


FOR THE PROJECT
ARCHSTONE KENTLANDS
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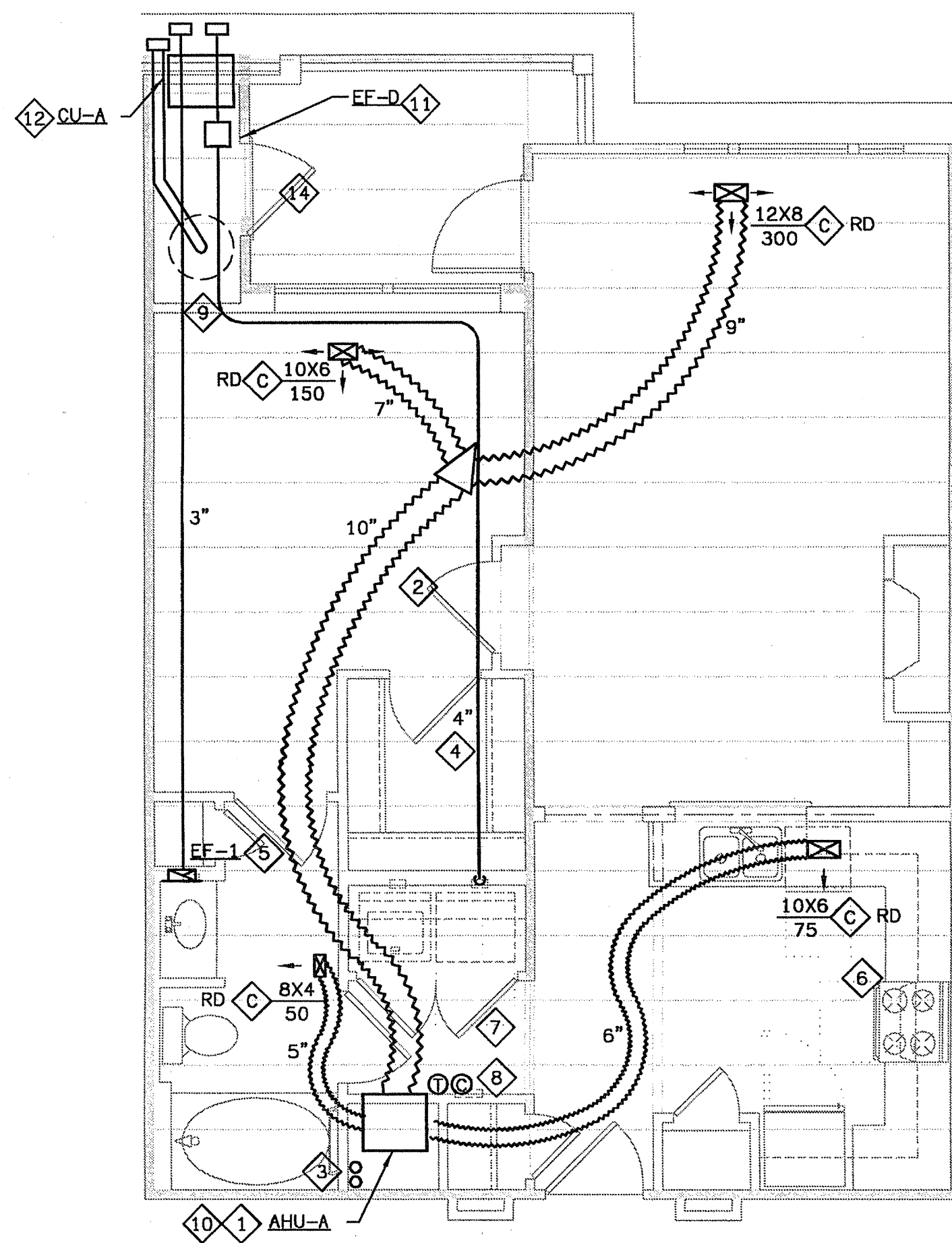
FOR
ARCHSTONE COMMUNITIES
 Six Piedmont Center, Suite 600
 Atlanta, Georgia, 30305
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REVISIONS
 07/18/03 RELEASED FOR CONSTRUCTION
 07/18/03 RELEASED FOR CONSTRUCTION

DATE: 06/10/02
 JOB NUMBER: 021102
 DRAWN BY: GJK
 CHECKED BY: GJK
 DRAWING TITLE: GJK
BUILDING 100B, 200B & 500 - LEVEL THREE HVAC PLAN
 DRAWING NUMBER: **H-139**
 COMMENTS:



1 UNIT A2 - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



2 UNIT A3 - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT

ENTIRE SHEET IS NEW

HVAC SHEET NOTES

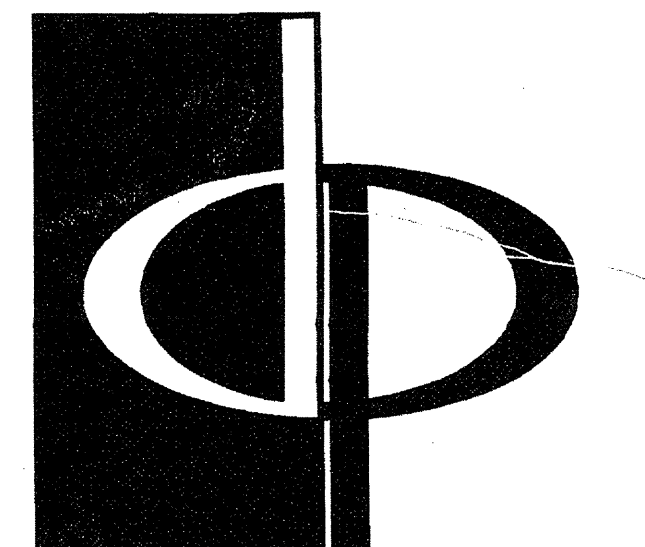
- 1 MOUNT AHU PER DETAIL ON SHEET H-6. 3.
- 2 UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6. 4.
- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6. 4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6. 4.
- 6 UL RATED DUCTLESS RANGE HOOD.
- 7 UNDERCUT DRYER CLOSET DOOR 2" FOR DRYER MAKEUP AIR.
- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
- 10 PROVIDE 3/4" INSULATED TYPE L COPPER OR CPVC HOT WATER SUPPLY AND RETURN LINES BETWEEN WATER HEATER AND AHU. PROVIDE ISOLATION VALVES AT WATER HEATER.
- 11 THIS DRYER VENT EXCEEDS 25 EQUIVALENT FEET, EXCEPT AT THE TOP FLOOR WHERE THE DRYER VENT IS ROUTED TO THE ROOF. THEREFORE, ON THE LOWER FLOORS, INSTALL THIS DRYER BOOSTER FAN IN LINE ABOVE THE CEILING. ARCHITECTURAL TRADES SHALL PROVIDE A 16"x16" FIRE RATED CEILING ACCESS DOOR FOR MAINTENANCE OF DRYER BOOSTER FAN.
- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6. 1 FOR C.U. TYPE PER UNIT.
- 13 PROVIDE A BAFFLE BEHIND THIS SIDE WALL REGISTER. CUT A HOLE IN THE BAFFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND C&S CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.

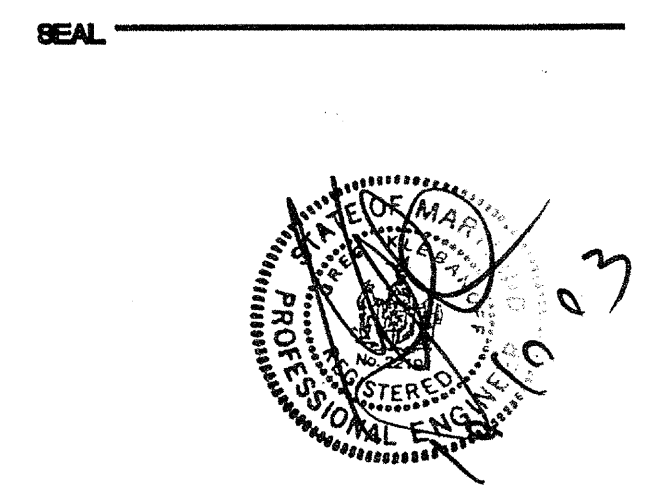
INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND C&S CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.



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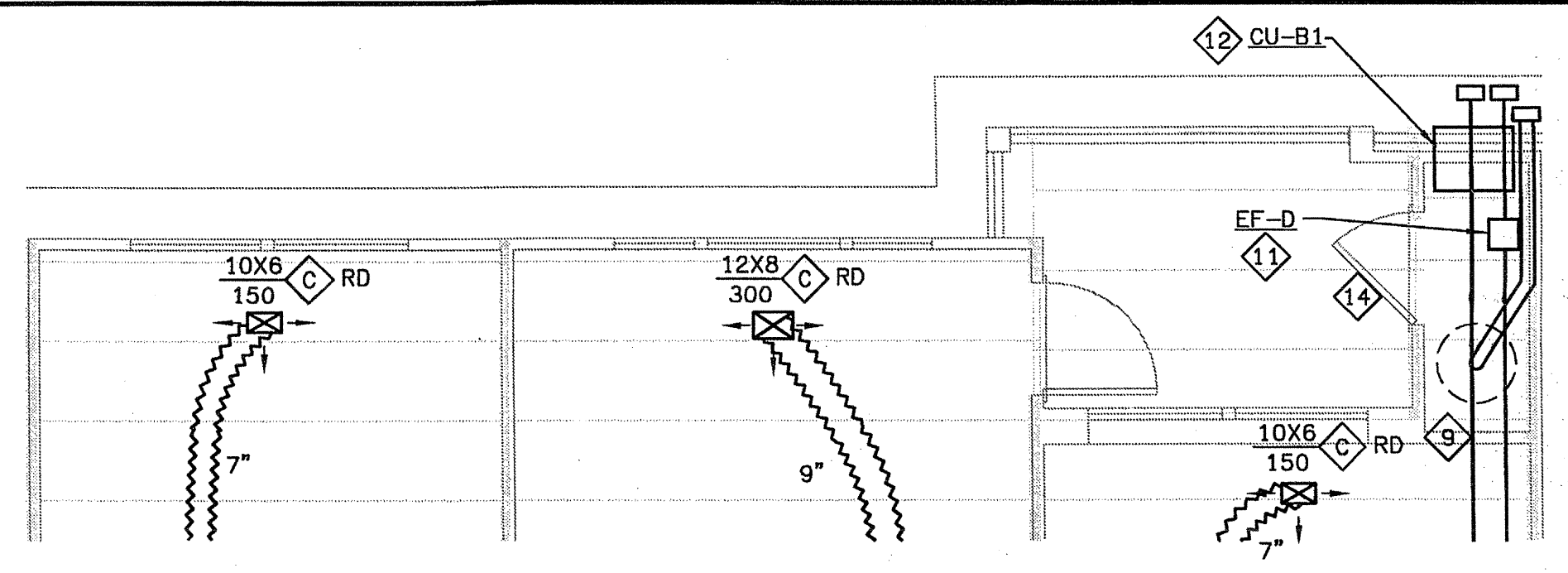
CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY THE ARCHITECT OR PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 18948 EXPIRATION DATE SEPTEMBER 3, 2004

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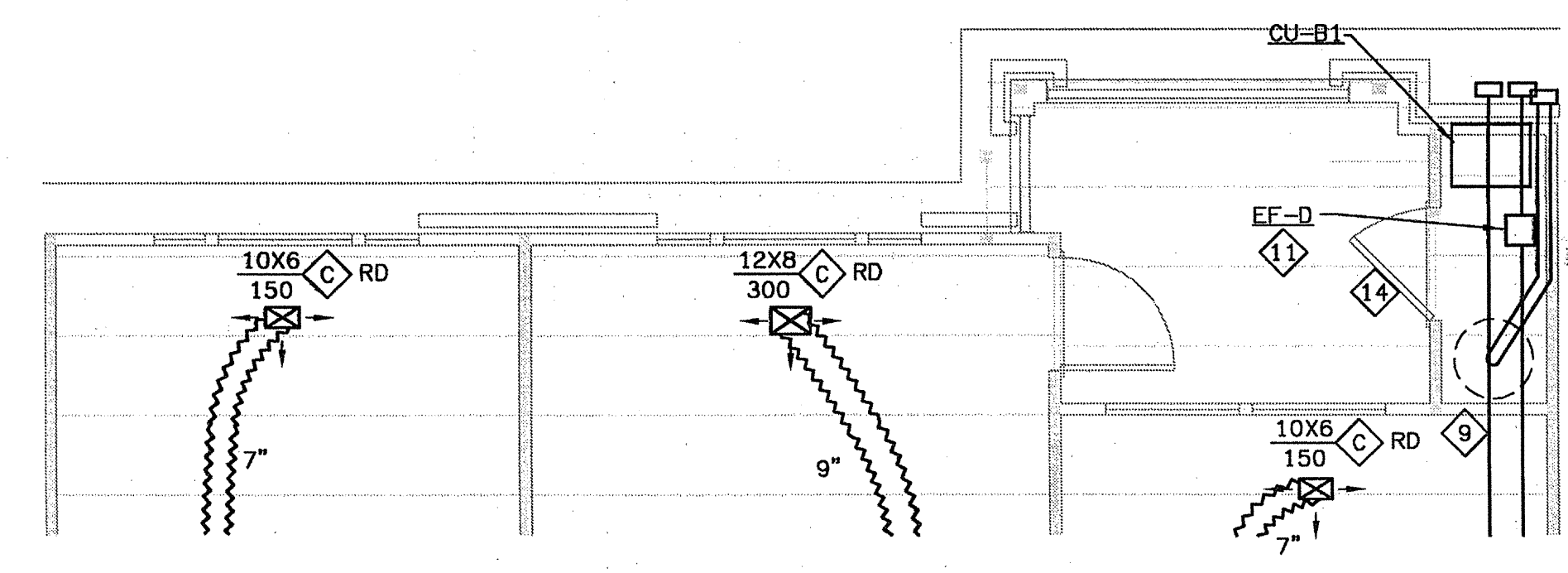
FOR
ARCHSTONE COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia, 30305
404-237-9292

REVISIONS
07/18/03 RELEASED FOR CONSTRUCTION

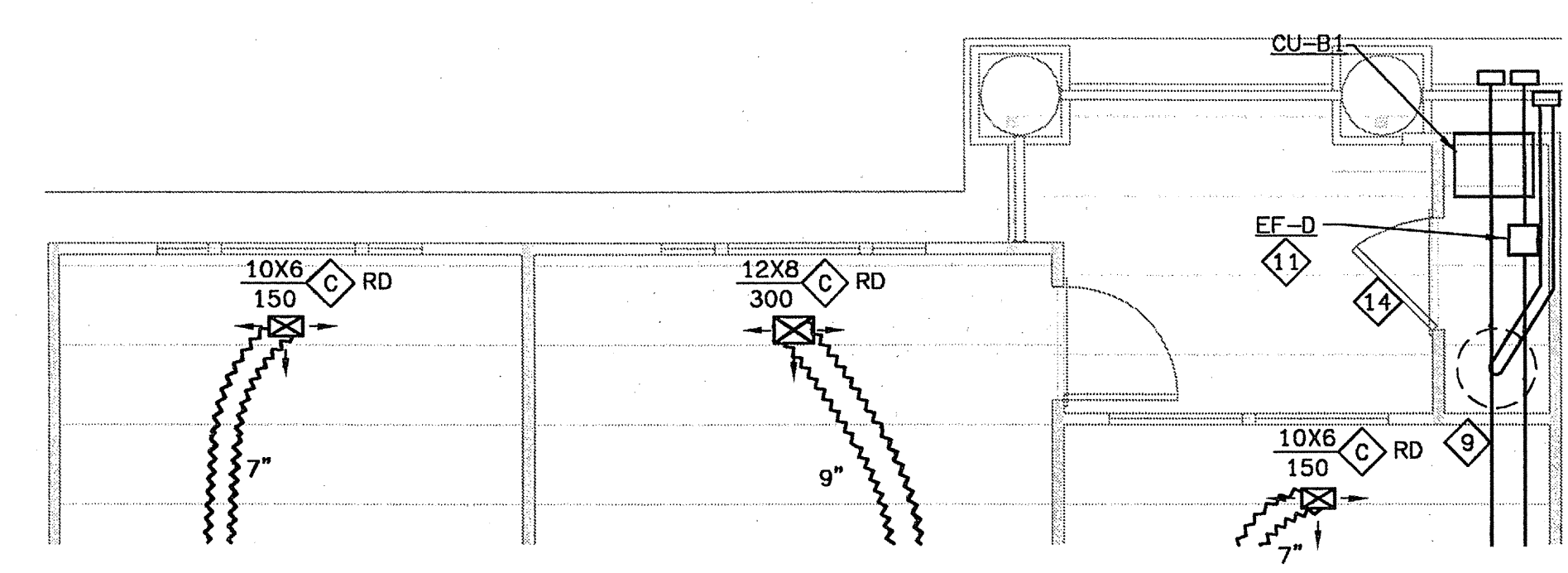
DATE 06/10/02
JOB NUMBER 021102
DRAWN BY GJK
CHECKED BY GJK
DRAWING TITLE UNIT A2 & A3 HVAC PLANS
DRAWING NUMBER H-3.2A
COMMENTS



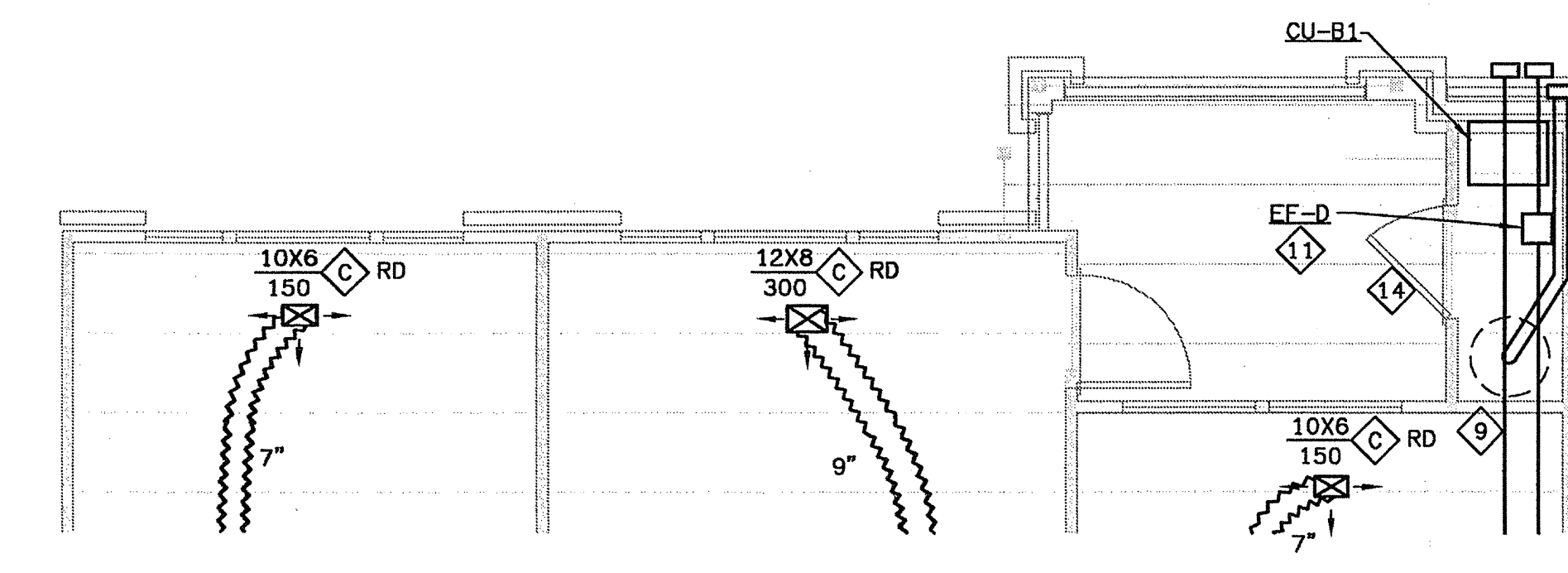
2 UNIT BIA & BI-LA - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



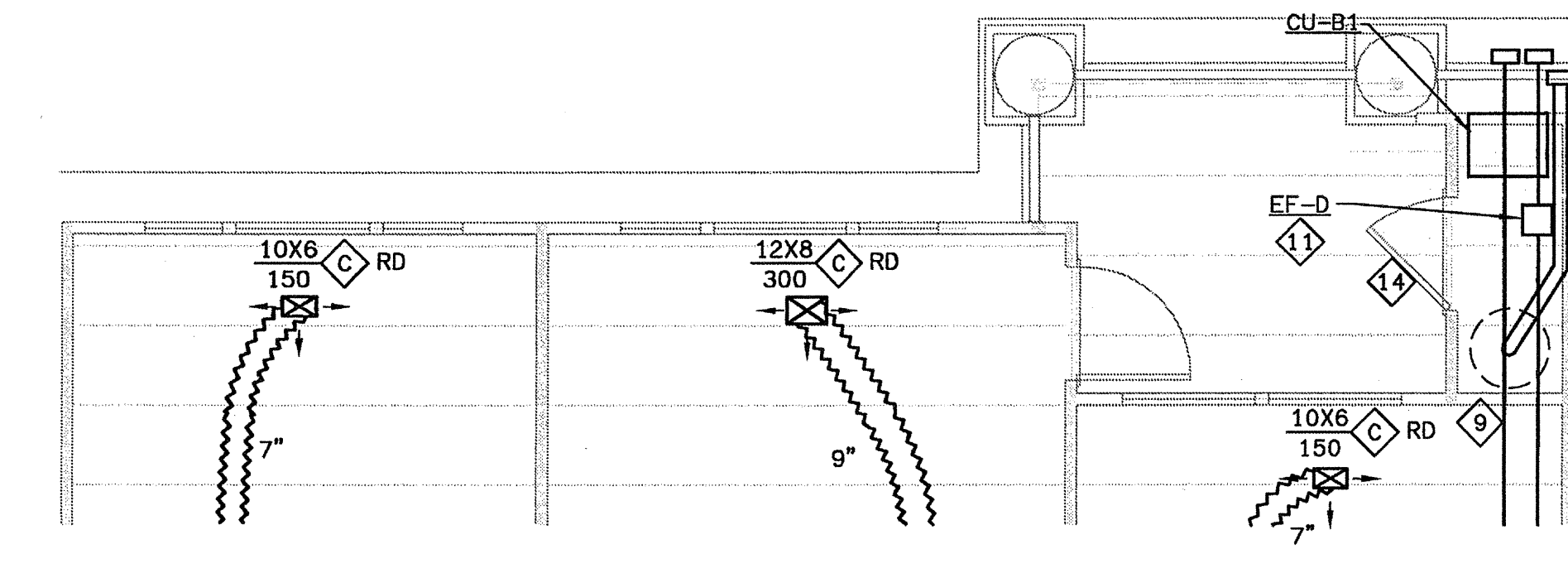
3 UNIT BIJ - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



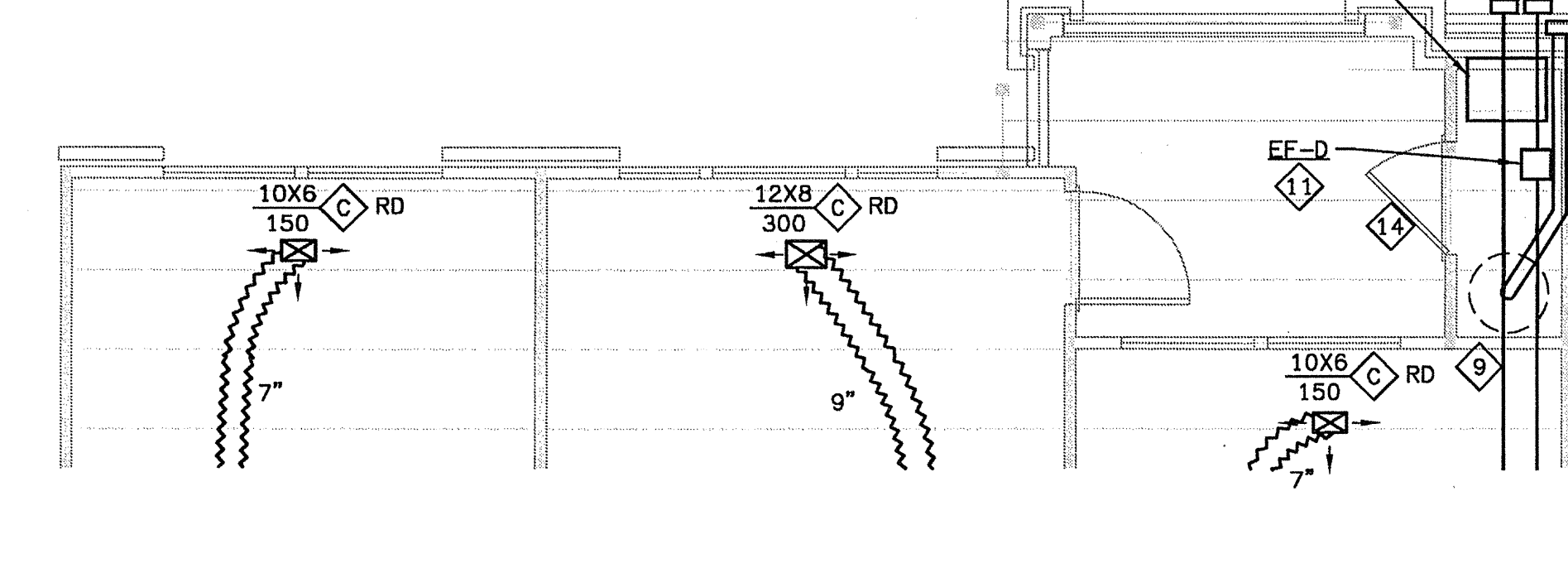
4 UNIT BIC - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



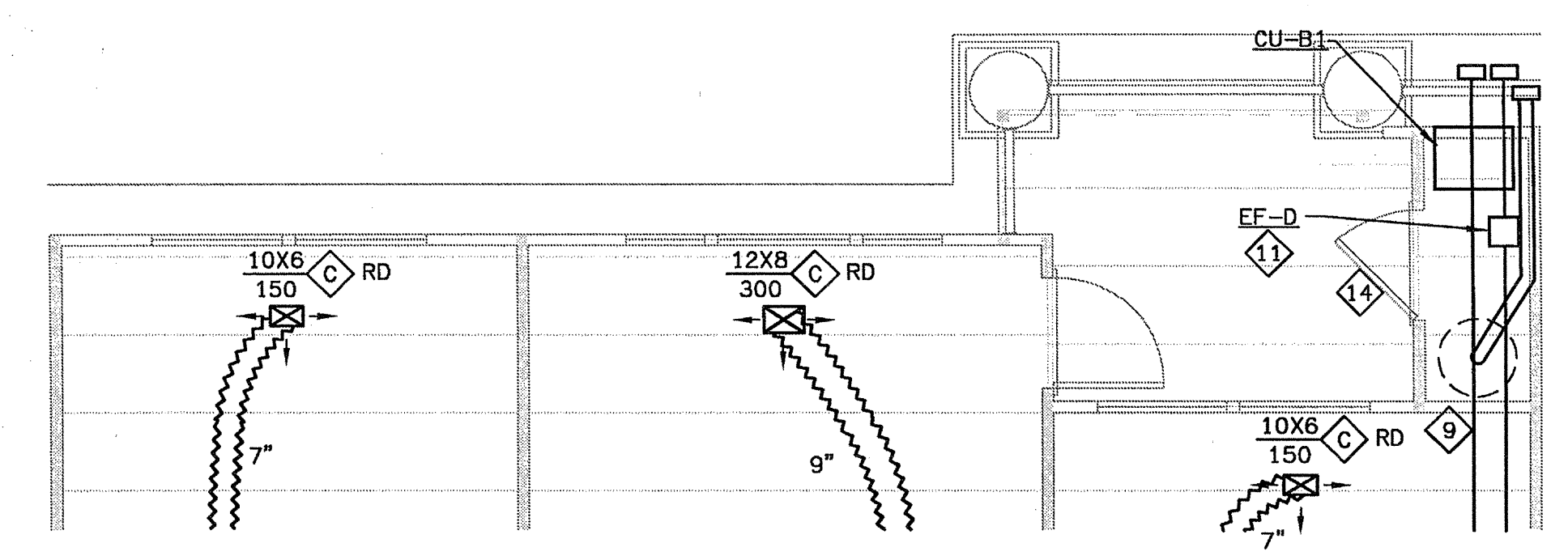
5 UNIT BID - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



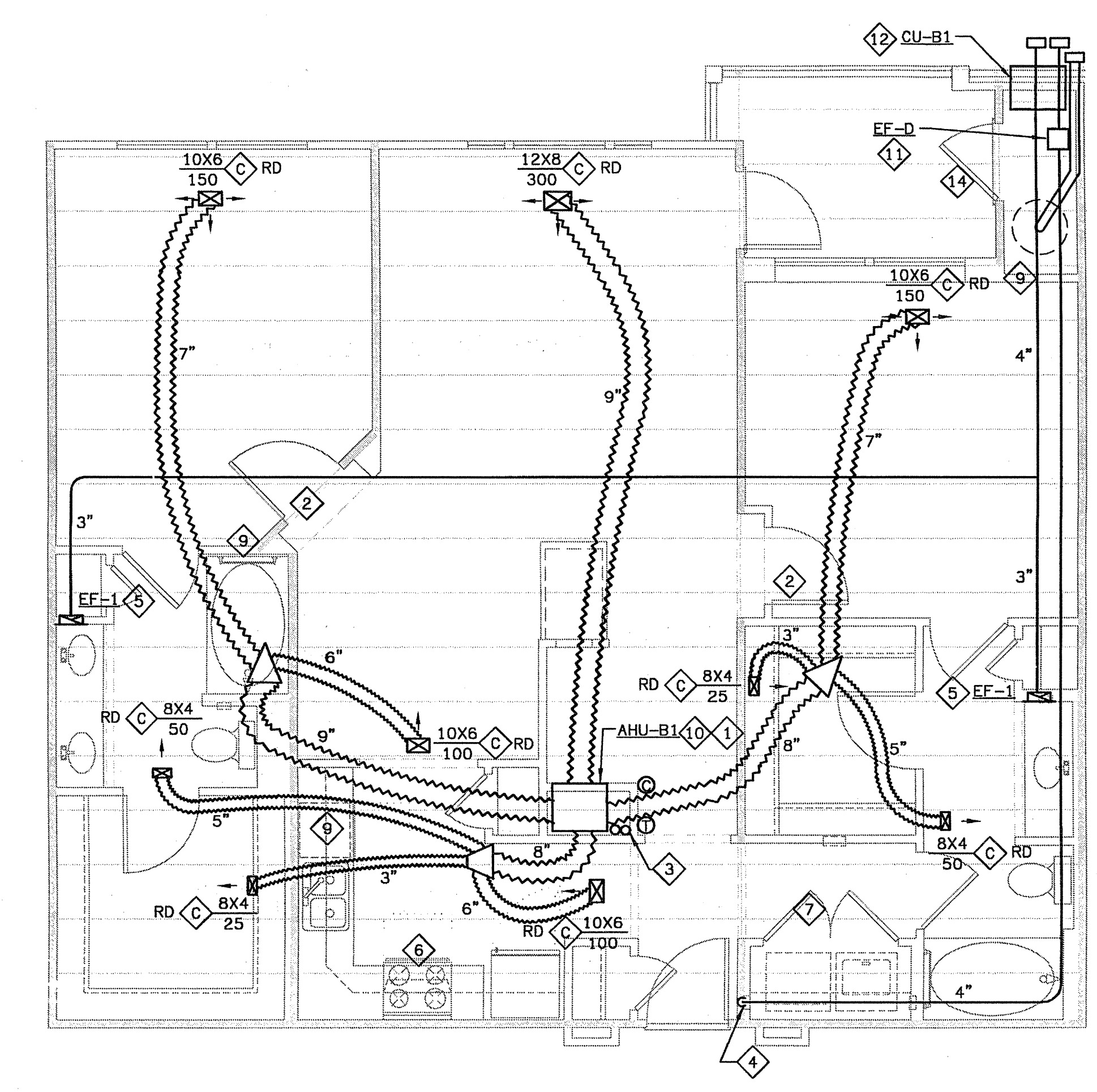
6 UNIT BIE & BI-LE - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



7 UNIT BIH - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



8 UNIT BU & BI-LJ - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



1 UNIT BI - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT

HVAC SHEET NOTES

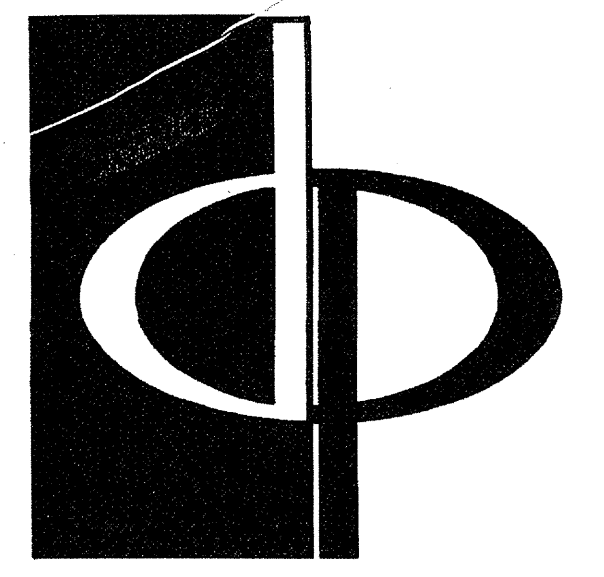
- 1 MOUNT AHU PER DETAIL ON SHEET H-6. 3.
- 2 UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6. 4.
- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6. 4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6. 4.
- 6 UL RATED DUCTLESS RANGE HOOD.
- 7 UNDERCUT DRYER CLOSET DOOR 2" FOR DRYER MAKEUP AIR.
- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
- 10 PROVIDE 3/4" INSULATED TYPE L COPPER OR CPVC HOT WATER SUPPLY AND RETURN LINES BETWEEN WATER HEATER AND AHU. PROVIDE ISOLATION VALVES AT WATER HEATER.
- 11 THIS DRYER VENT EXCEEDS 25 EQUIVALENT FEET, EXCEPT AT THE TOP FLOOR WHERE THE DRYER VENT IS ROUTED TO THE ROOF. THEREFORE, ON THE LOWER FLOORS, INSTALL THIS DRYER BOOSTER FAN INLINE ABOVE THE CEILING. ARCHITECTURAL TRADES SHALL PROVIDE A 18" X 18" FIRE RATED CEILING ACCESS DOOR FOR MAINTENANCE OF DRYER BOOSTER FAN.
- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6. 1 FOR C. U. TYPE PER UNIT.
- 13 PROVIDE A BAFFLE BEHIND THIS SIDE WALL REGISTER. CUT A HOLE IN THE BAFFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND C&S CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.

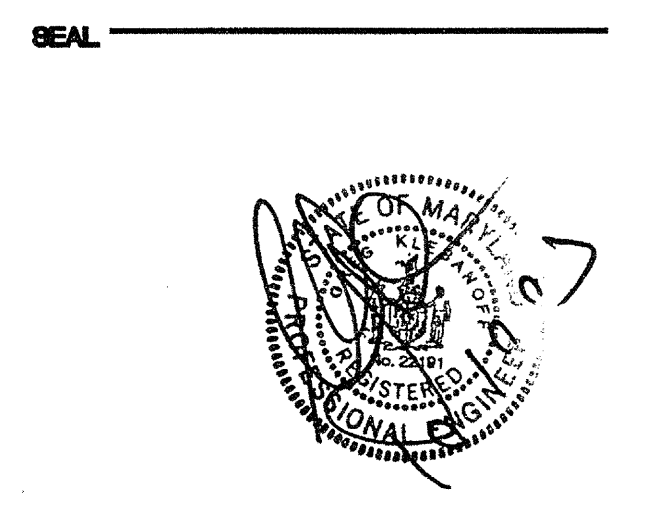
INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND C&S CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.



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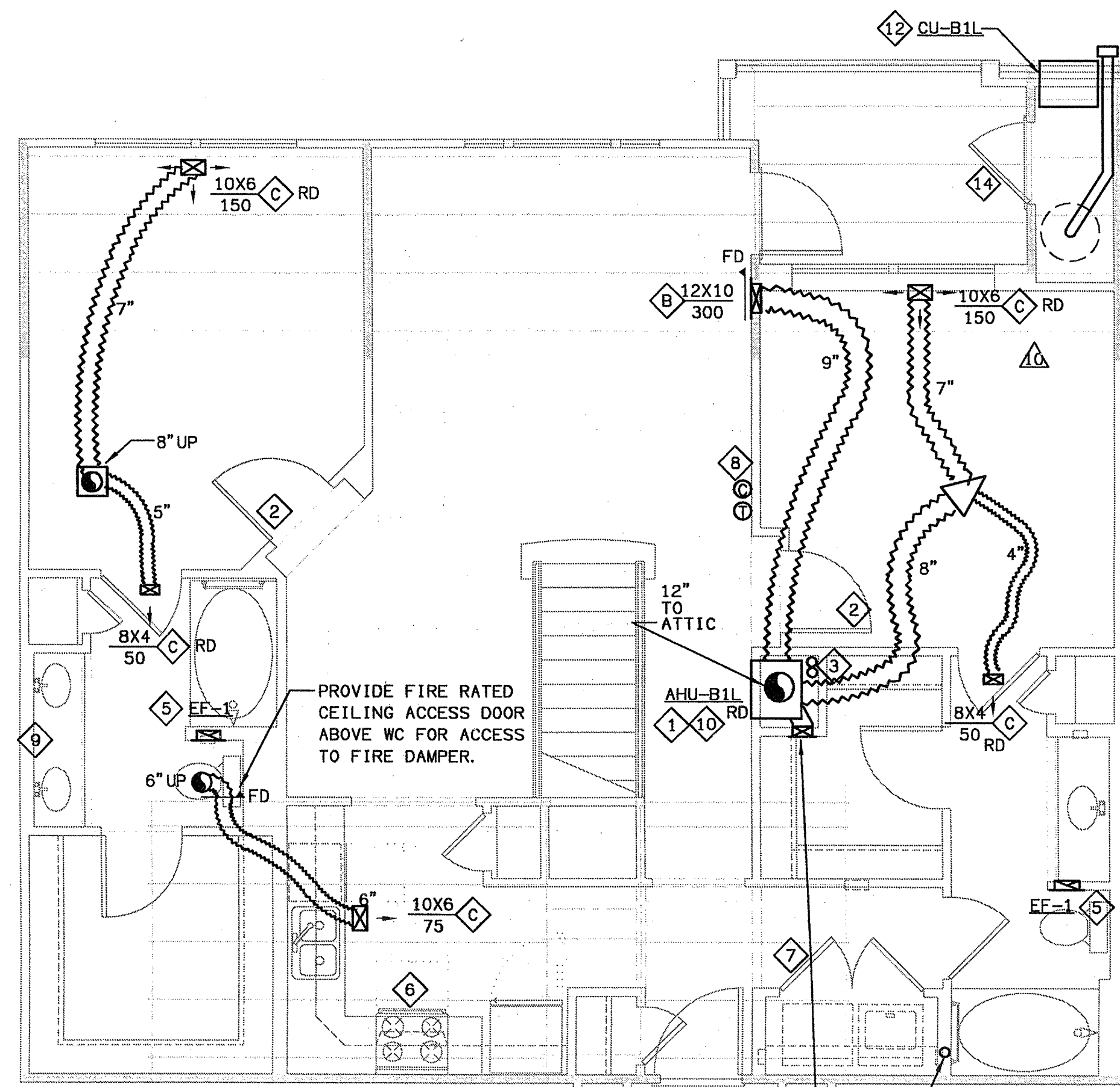
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PROJECT
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FOR
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Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
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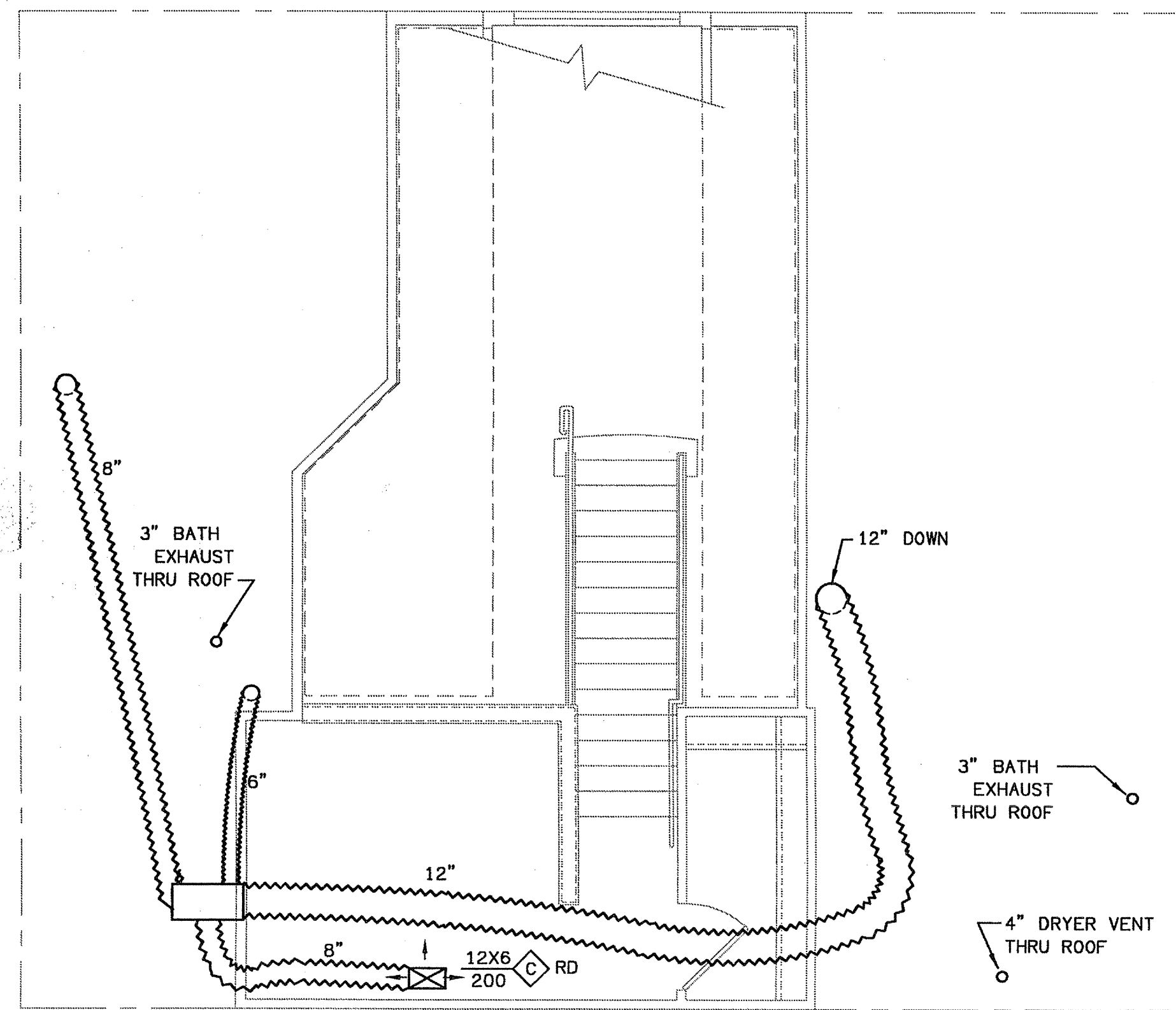
REVISIONS
07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02
JOB NUMBER 02109
DRAWN BY GHK
CHECKED BY GHK
DRAWING TITLE UNIT BI
HYAC PLANS
DRAWING NUMBER H-3.3
COMMENTS



1 UNIT BI-L - HVAC PLAN
SCALE: 1/4" = 1'-0"

PROVIDE FIBERBOARD BAFEL BEHIND REGISTER. PROVIDE MAX 1.5" HOLE IN BAFEL TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE.



2 UNIT BI-LM - HVAC PLAN
SCALE: 1/4" = 1'-0"

HVAC SHEET NOTES

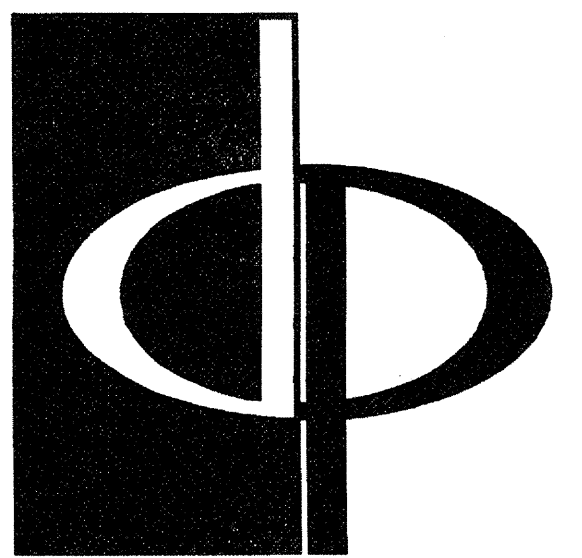
- 1 MOUNT AHU PER DETAIL ON SHEET H-6. 3.
- 2 UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6. 4.
- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6. 4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6. 4.
- 6 UL RATED DUCTLESS RANGE HOOD.
- 7 UNDERCUT DRYER CLOSET DOOR 2" FOR DRYER MAKEUP AIR.
- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
- 10 PROVIDE 3/4" INSULATED TYPE L COPPER OR CPVC HOT WATER SUPPLY AND RETURN LINES BETWEEN WATER HEATER AND AHU. PROVIDE ISOLATION VALVES AT WATER HEATER.
- 11 THIS DRYER VENT EXCEEDS 25 EQUIVALENT FEET, EXCEPT AT THE TOP FLOOR WHERE THE DRYER VENT IS ROUTED TO THE ROOF. THEREFORE, ON THE LOWER FLOORS, INSTALL THIS DRYER BOOSTER FAN IN LINE ABOVE THE CEILING. ARCHITECTURAL TRADES SHALL PROVIDE A 18"X16" FIRE RATED CEILING ACCESS DOOR FOR MAINTENANCE OF DRYER BOOSTER FAN.
- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6. 1 FOR C. U. TYPE PER UNIT.
- 13 PROVIDE A BAFLE BEHIND THIS SIDE WALL REGISTER. CUT A HOLE IN THE BAFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND CAS CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.

INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND CAS CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.

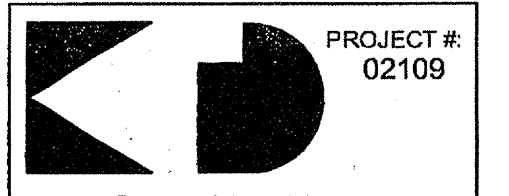


THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM

1000 ABERNATHY ROAD NE, SUITE 600
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TELEPHONE: 770 396 7248
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WWW.THEPRESTONPARTNERSHIP.COM

CONSULTANT



KTD Consulting Engineers
ALTAMONTE SPRINGS, FL.
237 S. WESTMONTE DR.
PH: 407.834.7900

FAIRFAX, VA
9840 MAIN STREET
PH: 703.338.2889

SEAL



CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 0248 EXPIRATION DATE SEPTEMBER 3, 2004.

PROJECT

ARCHSTONE
KENTLANDS

MARYLAND

FOR

ARCHSTONE
COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02

JOB NUMBER 021102

DRAWN BY GHK

CHECKED BY GHK

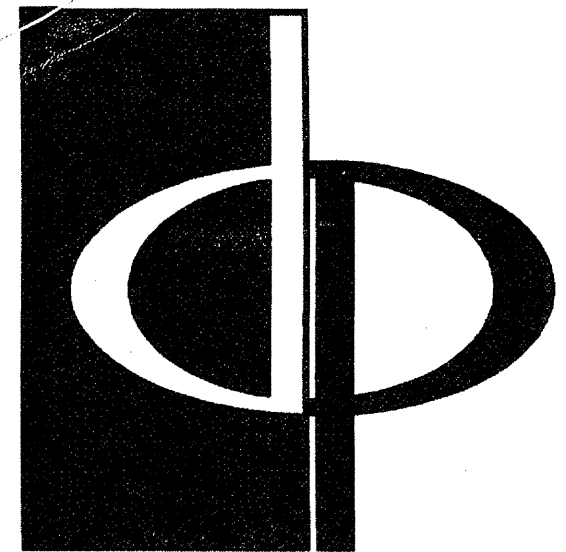
DRAWING TITLE

UNIT BI LOFT
HVAC PLANS

DRAWING NUMBER

H-3.4

COMMENTS



THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM

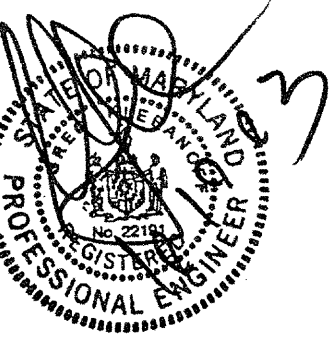
1000 ABERNATHY ROAD NE, SUITE 600
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TELEPHONE: 770 396 7248
FAX: 770 396 2945

WWW.THEPRESTONPARTNERSHIP.COM

CONSULTANT

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REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION

DATE

JOB NUMBER 0610102

DRAWN BY 021108

CHECKED BY GHK

DRAWING TITLE GHK

UNIT B2
HVAC PLANS

DRAWING NUMBER H-3.5

COMMENTS

HVAC SHEET NOTES

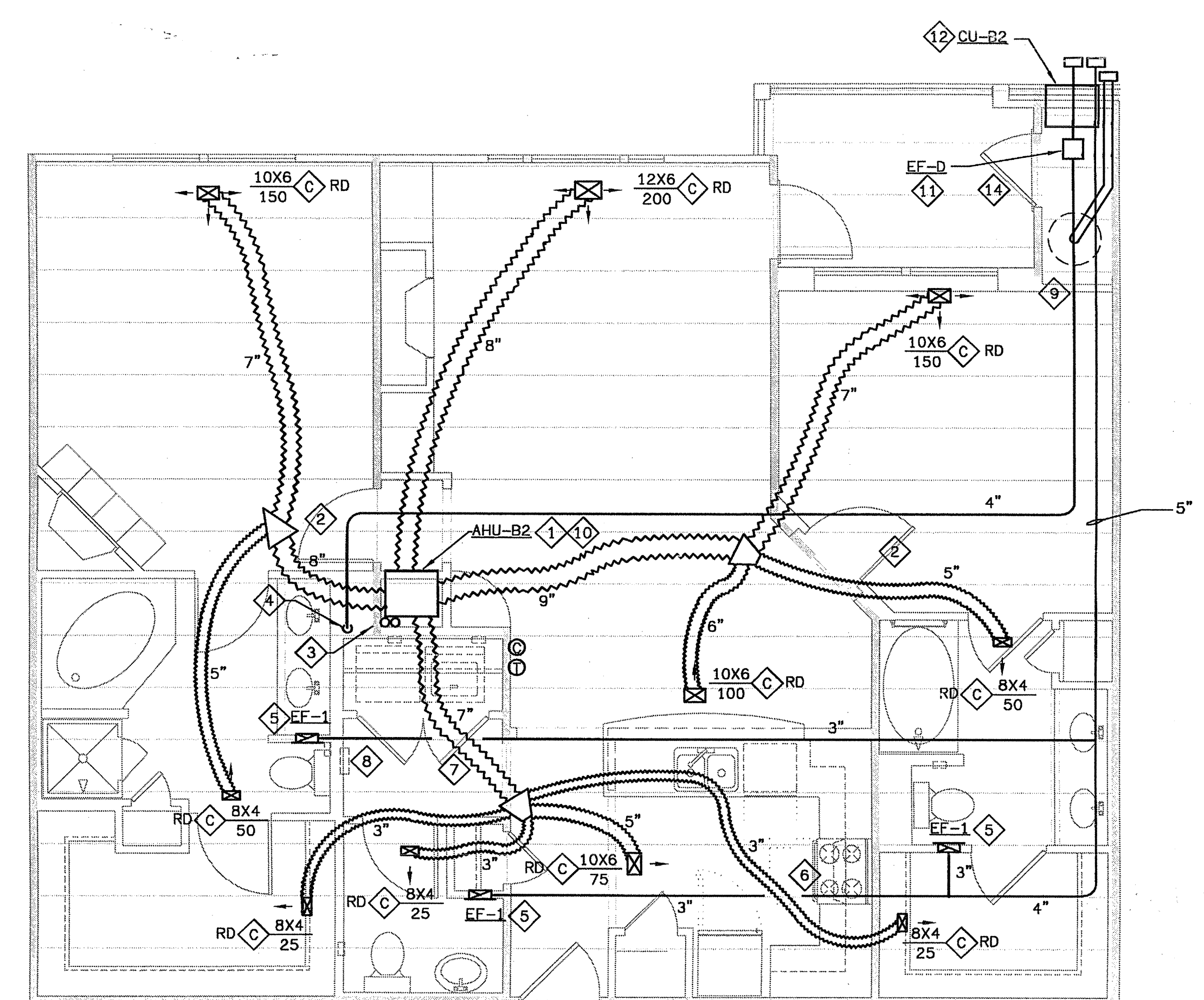
- 1 MOUNT AHU PER DETAIL ON SHEET H-6. 3.
- 2 UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6. 4.
- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6. 4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6. 4.
- 6 UL RATED DUCTLESS RANGE HOOD.
- 7 UNDERCUT DRYER CLOSET DOOR 2" FOR DRYER MAKEUP AIR.
- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
- 10 PROVIDE 3/4" INSULATED TYPE L COPPER OR CPVC HOT WATER SUPPLY AND RETURN LINES BETWEEN WATER HEATER AND AHU. PROVIDE ISOLATION VALVES AT WATER HEATER.
- 11 THIS DRYER VENT EXCEEDS 25 EQUIVALENT FEET, EXCEPT AT THE TOP FLOOR WHERE THE DRYER VENT IS ROOFED. THEREFORE, ON THE LOWER FLOORS, INSTALL THIS DRYER BOOSTER FAN IN LINE ABOVE THE CEILING. ARCHITECTURAL TRADES SHALL PROVIDE A 16" X 16" FIRE RATED CEILING ACCESS DOOR FOR MAINTENANCE OF DRYER BOOSTER FAN.
- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6. 1 FOR C. U. TYPE PER UNIT.
- 13 PROVIDE A BAFFLE BEHIND THIS SIDE WALL REGISTER, CUT A HOLE IN THE BAFFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

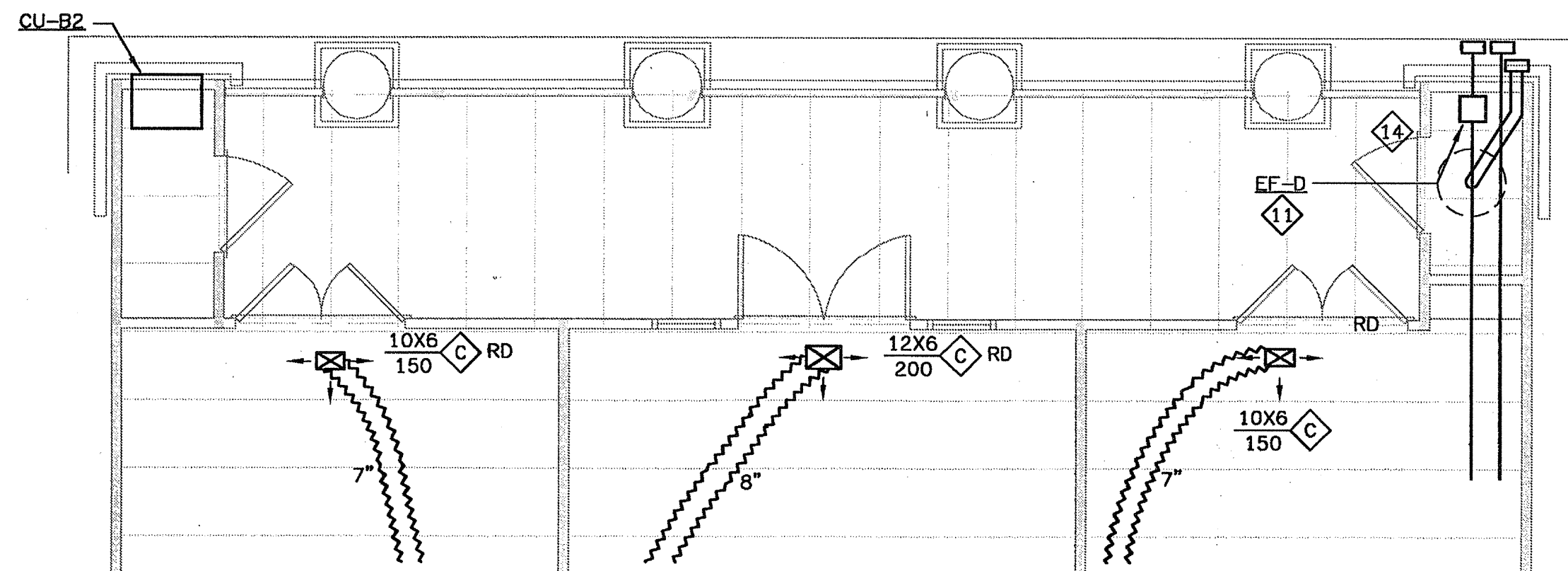
1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
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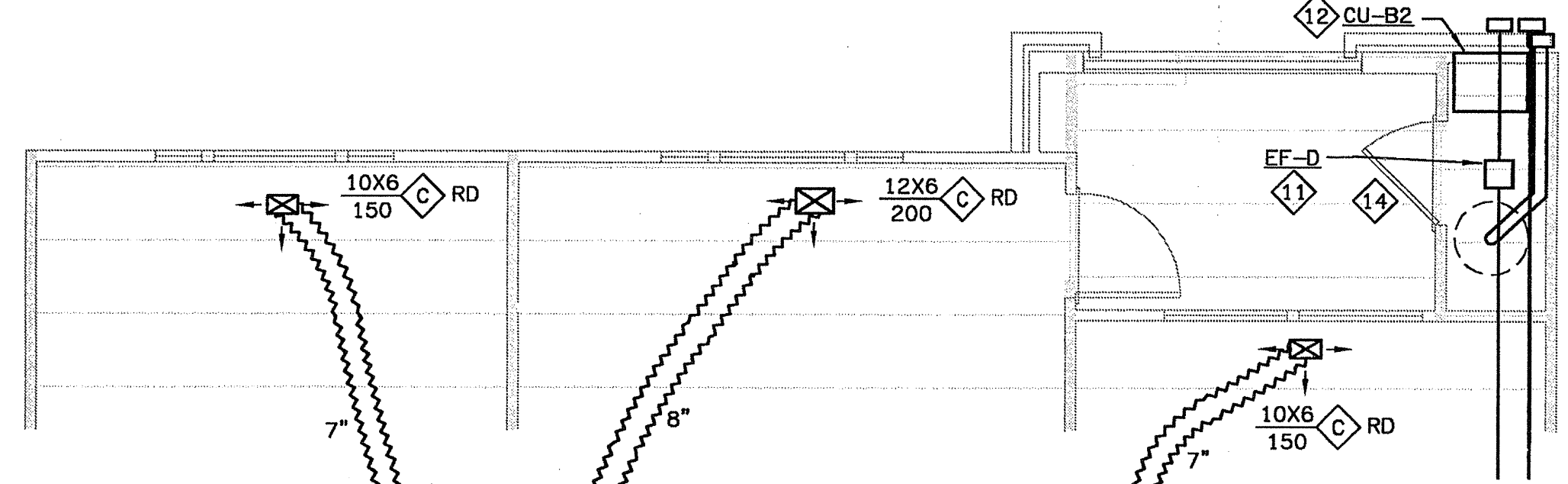
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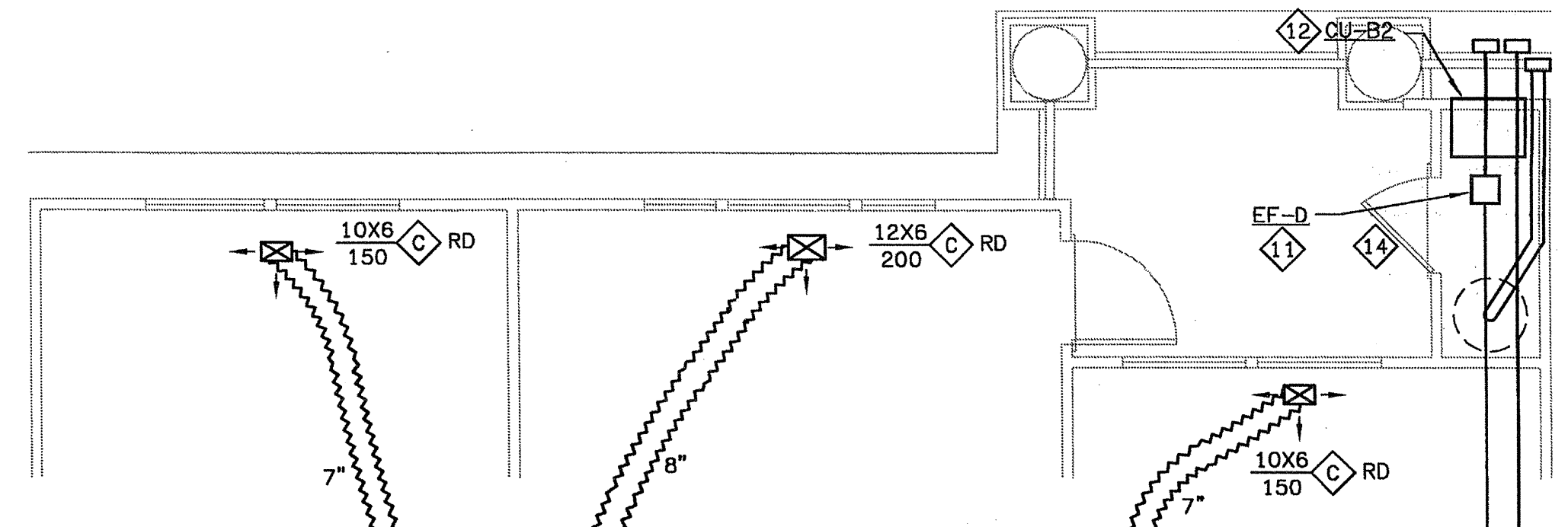
1 UNIT B2 - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



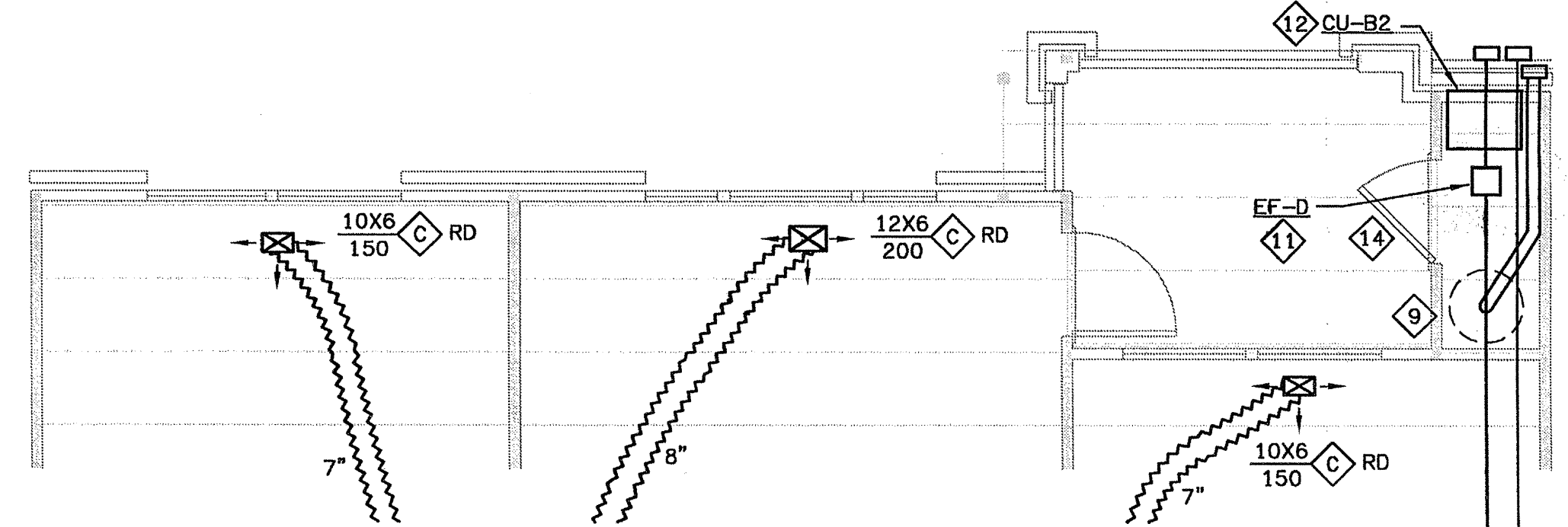
8 UNIT B2G - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



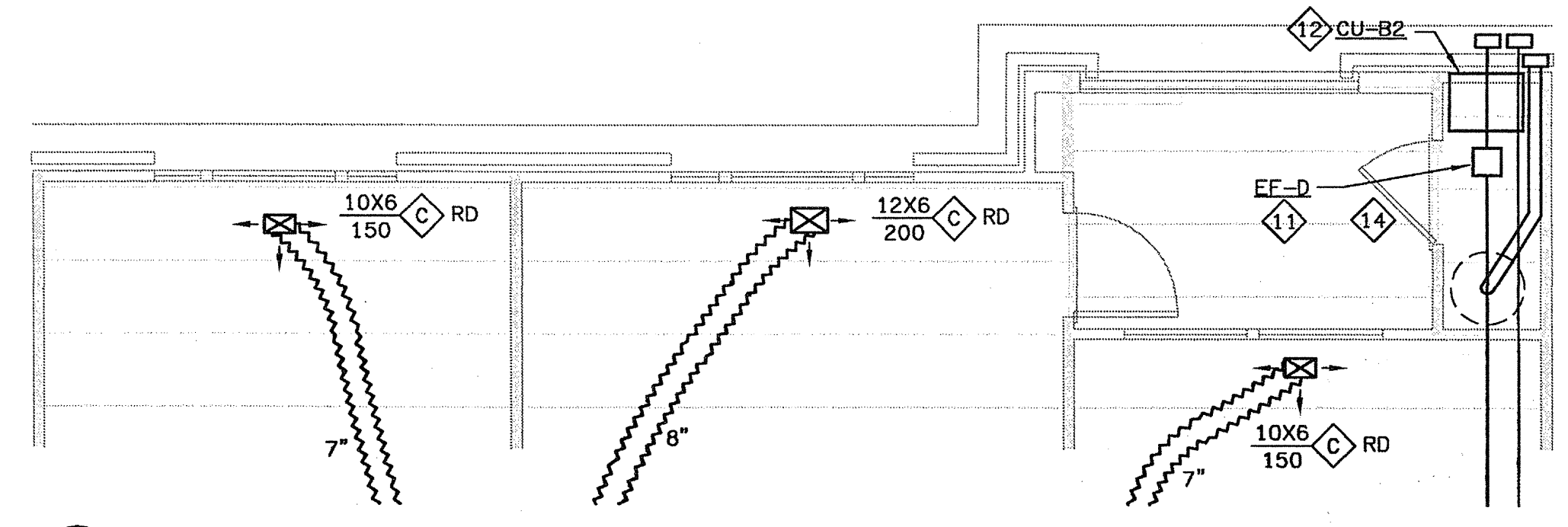
9 UNIT B2J - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



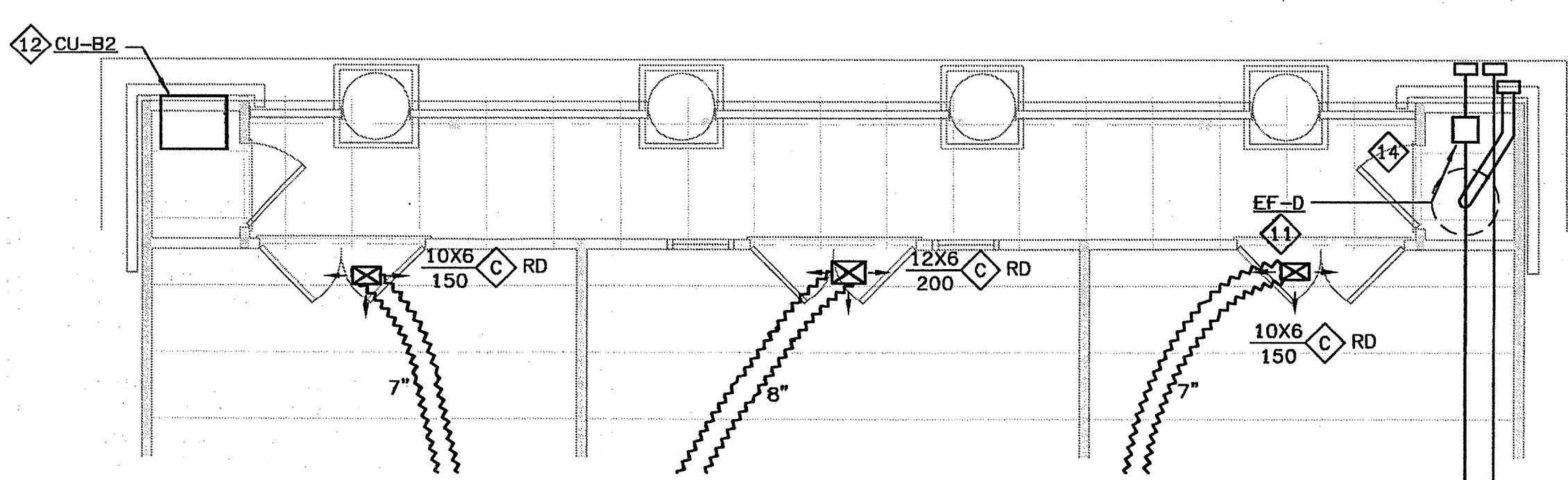
2 UNIT B2A & B2-LA - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



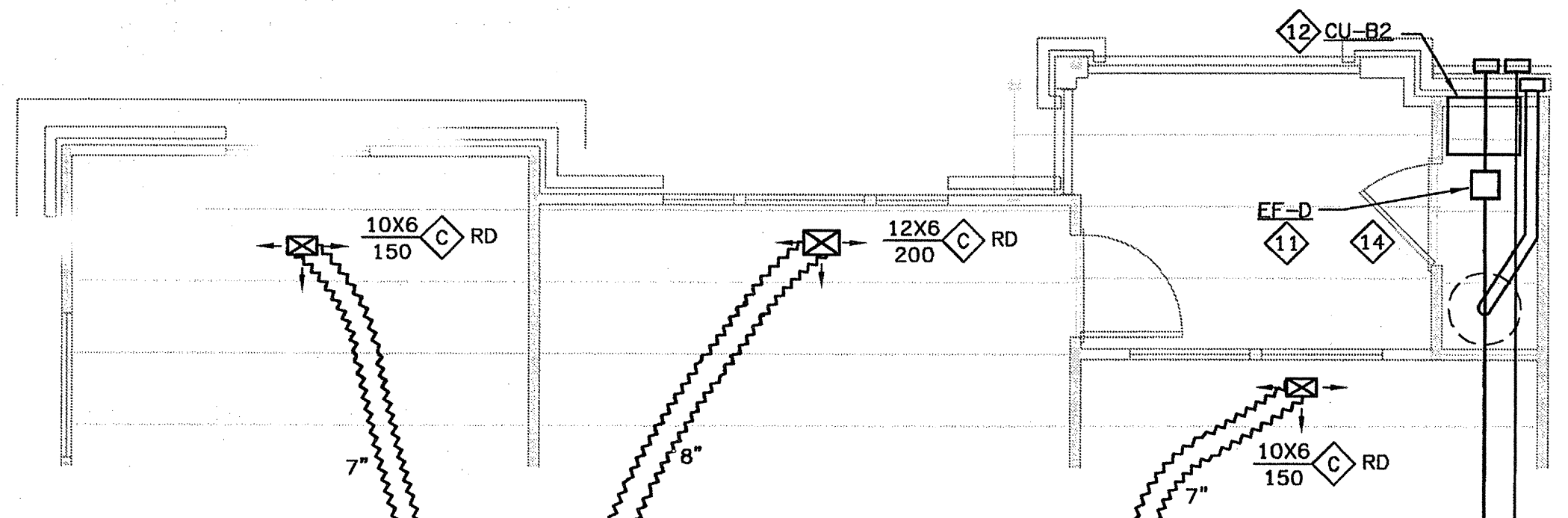
3 UNIT B2B - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



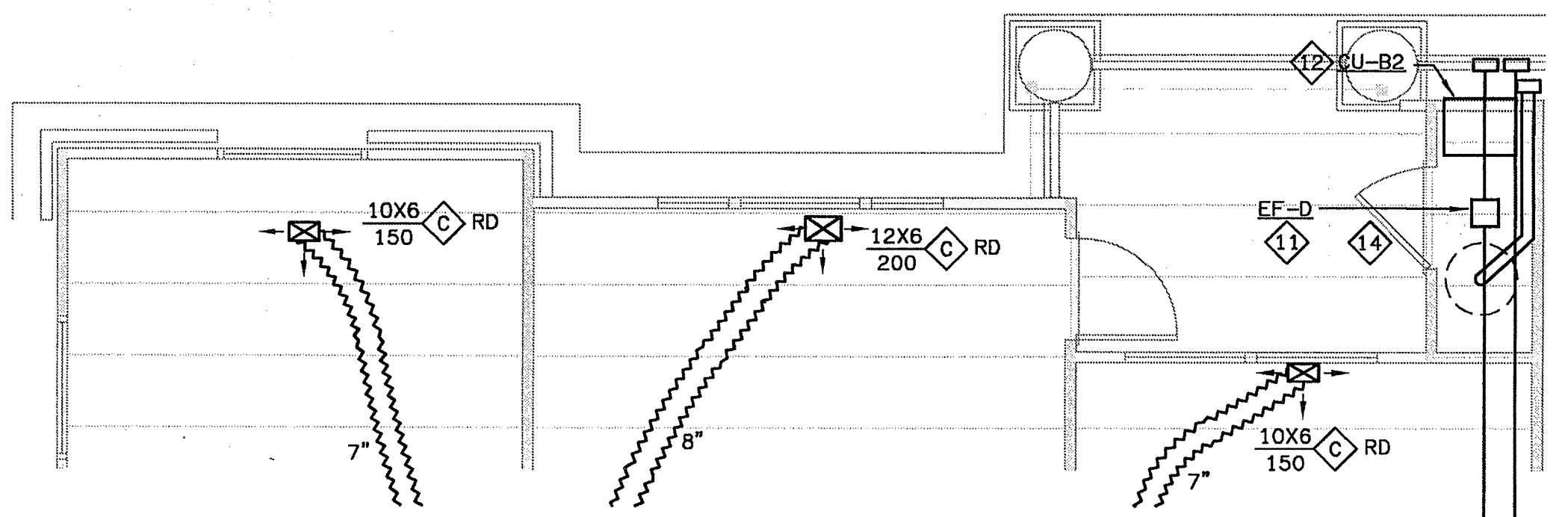
4 UNIT B2C & B2-LC - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



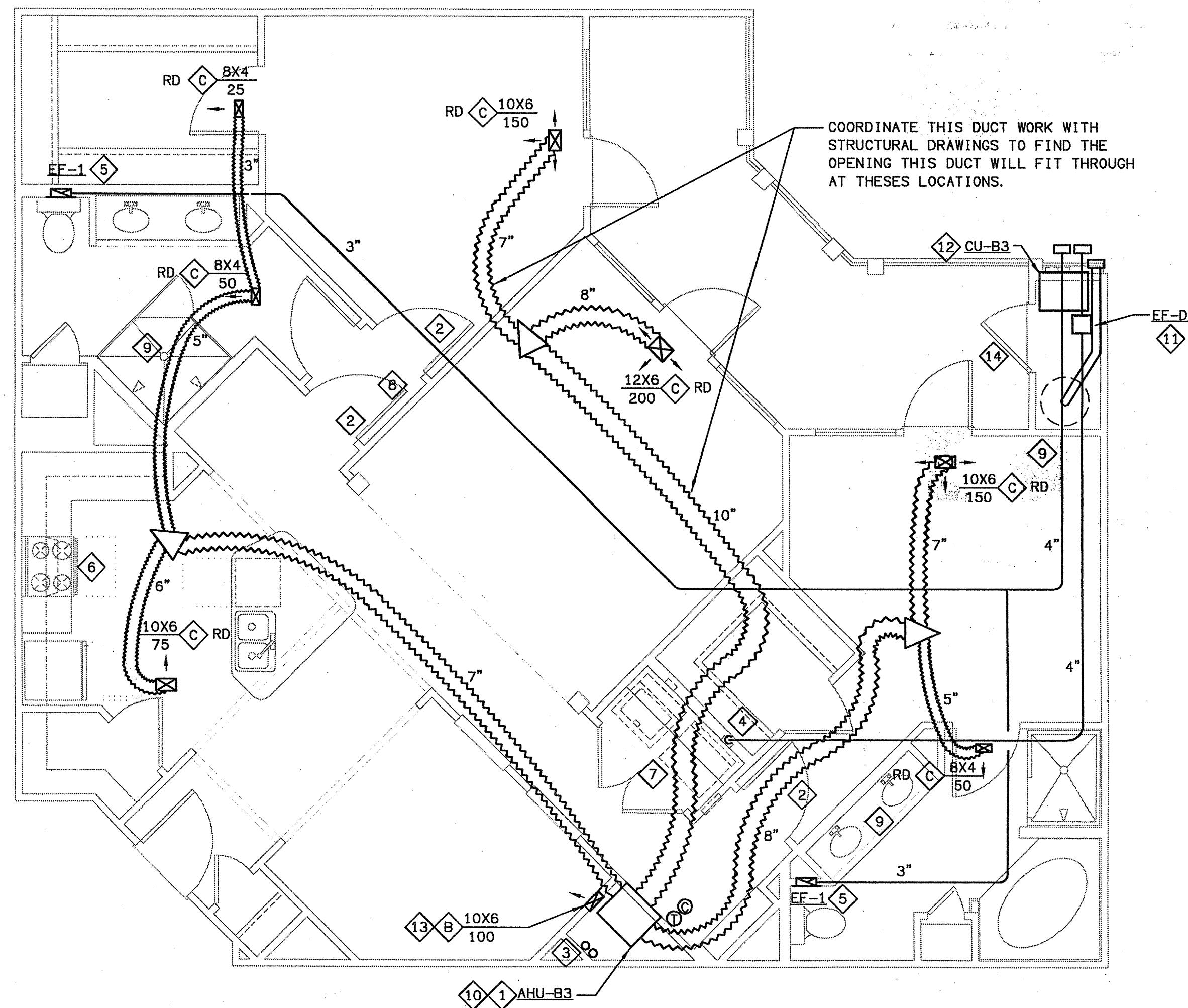
5 UNIT B2D - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



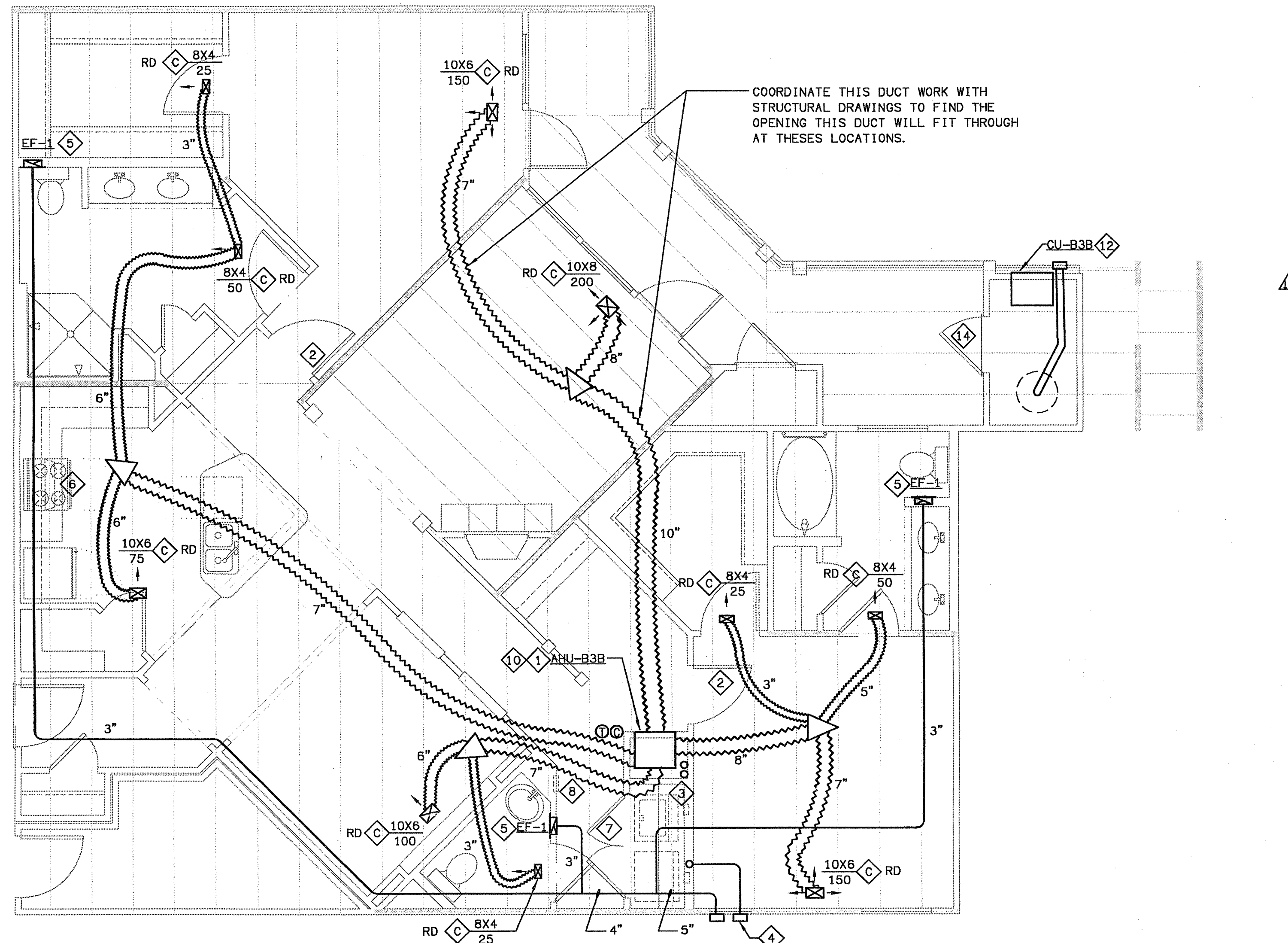
6 UNIT B2E - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



7 UNIT B2F - HVAC PLAN
SCALE: 1/4" = 1'-0"
07103-H-UNIT



1 UNIT B3 - HVAC PLAN
SCALE: 1/4" = 1'-0"
02/09-H-UNIT



2 UNIT B3B - HVAC PLAN
SCALE: 1/4" = 1'-0"
02/09-H-UNIT

HVAC SHEET NOTES

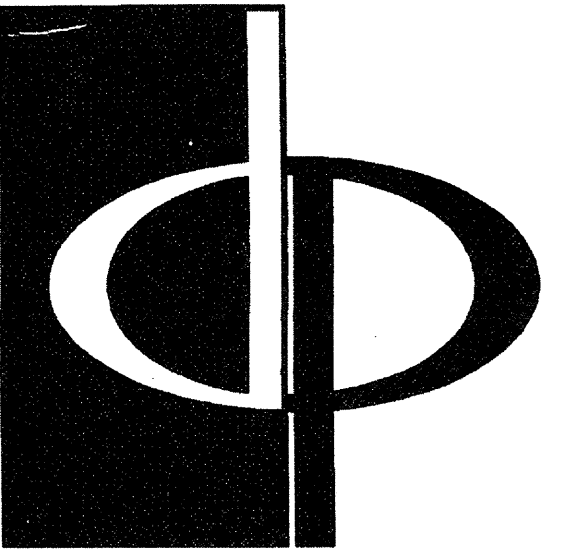
- 1 MOUNT AHU PER DETAIL ON SHEET H-6.3.
- 2 UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6.4.
- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6.4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6.4.
- 6 UL RATED DUCTLESS RANGE HOOD.
- 7 UNDERCUT DRYER CLOSET DOOR 2" FOR DRYER MAKEUP AIR.
- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
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- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6.1 FOR C.U. TYPE PER UNIT.
- 13 PROVIDE A BAFFLE BEHIND THIS SIDE WALL REGISTER, CUT A HOLE IN THE BAFFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM, FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
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INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM, FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

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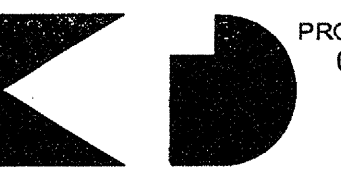


THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM

1000 ABERNATHY ROAD NE, SUITE 600
ATLANTA, GEORGIA 30328
TELEPHONE: 770 396 7248
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WWW.THEPRESTONPARTNERSHIP.COM

CONSULTANT

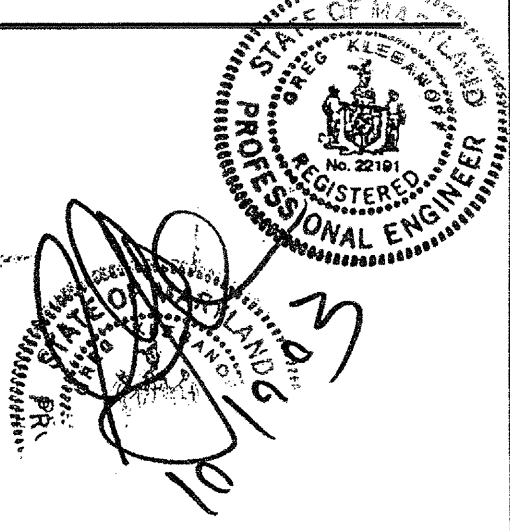


PROJECT #:
02109

KTD Consulting Engineers
ALTAMONTE SPRINGS, FL.
237 S. WESTMONTE DR.
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SEAL



PROJECT

ARCHSTONE
KENTLANDS

MARYLAND

FOR

ARCHSTONE
COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
10/07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02

JOB NUMBER 0211102

DRAWN BY GHK

CHECKED BY GHK

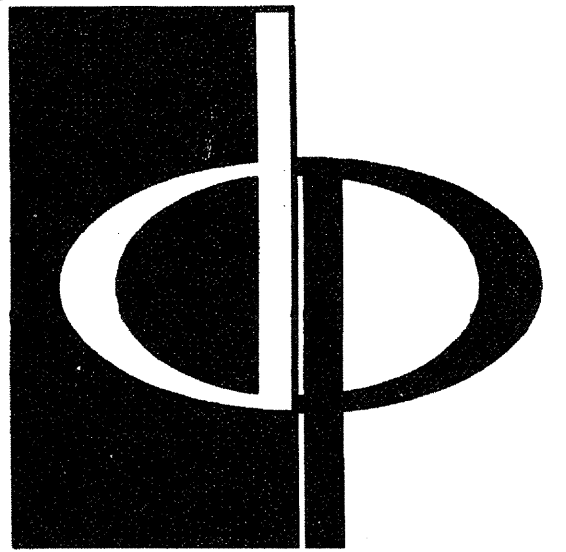
DRAWING TITLE

UNIT B3 & B3B
HVAC PLANS

DRAWING NUMBER

H-3.7

COMMENTS



THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM

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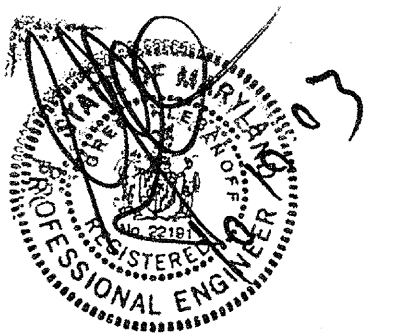
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I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NUMBER 0000 EXPIRATION DATE SEPTEMBER 3, 2009.

PROJECT

ARCHSTONE
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MARYLAND

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Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

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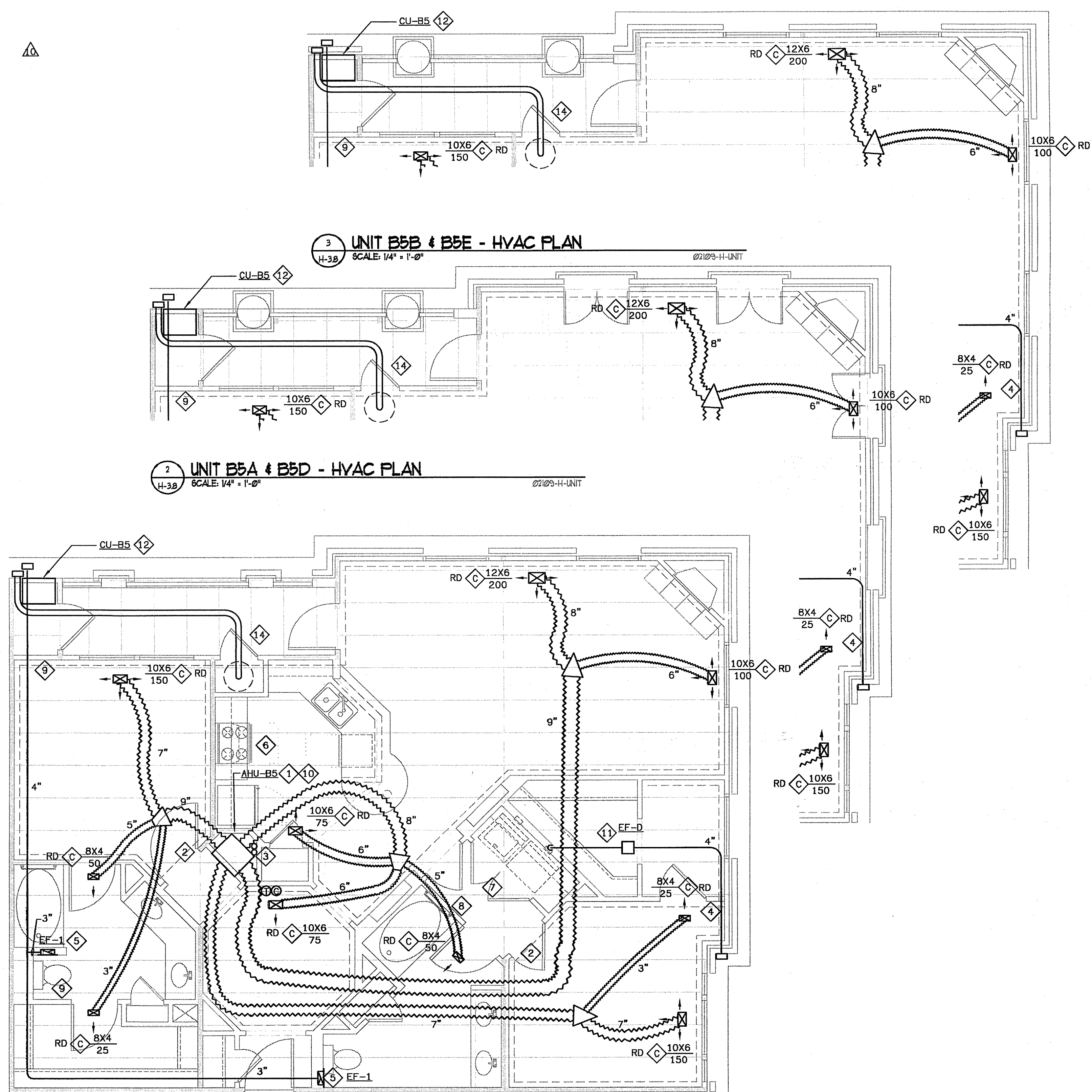
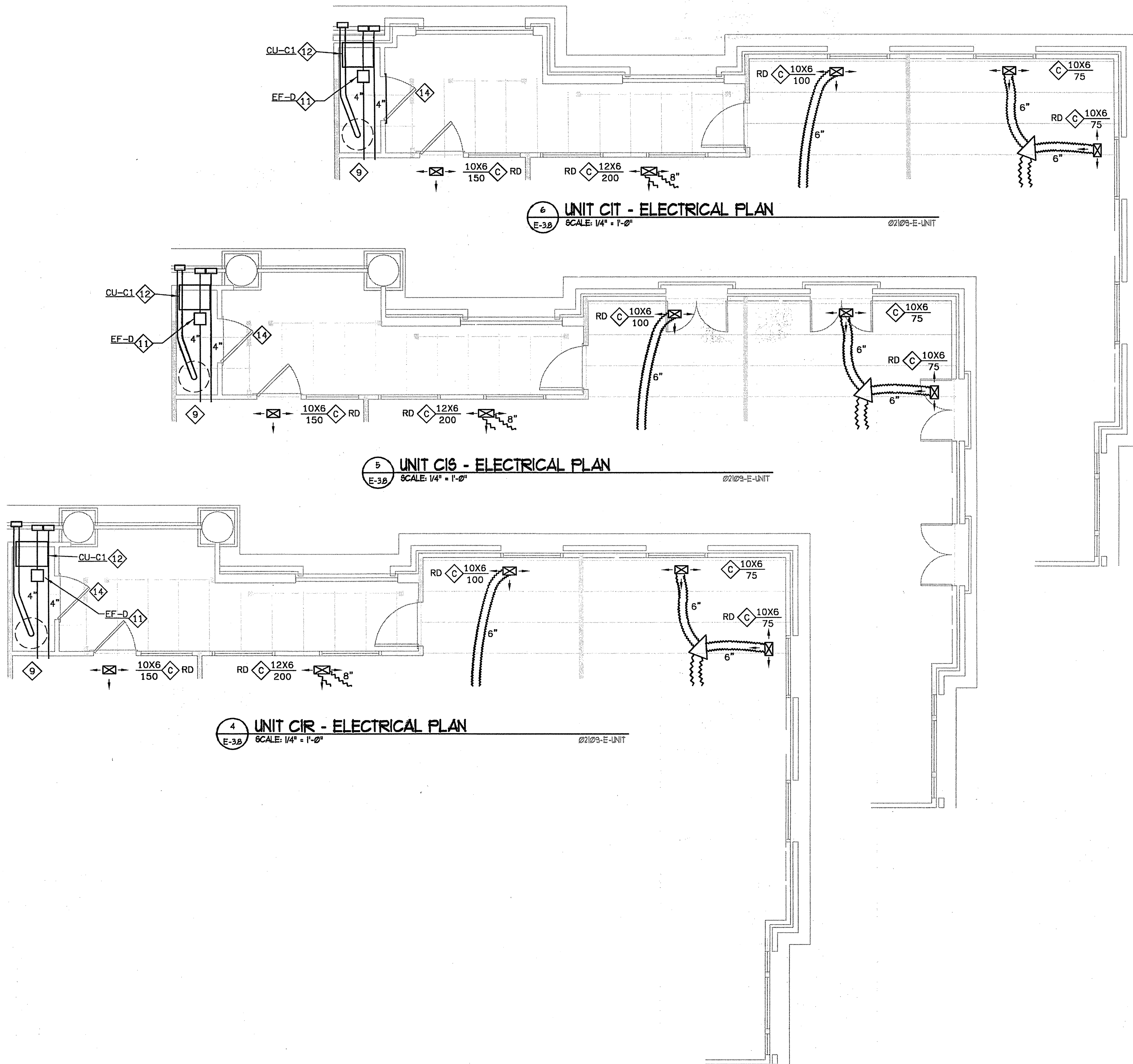
DRAWN BY GHK

CHECKED BY GHK

DRAWING TITLE UNIT B5 HVAC PLANS

DRAWING NUMBER H-3.8

COMMENTS



INSTALL TOP FLOOR DUCTS IN THE P522 JOIST SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

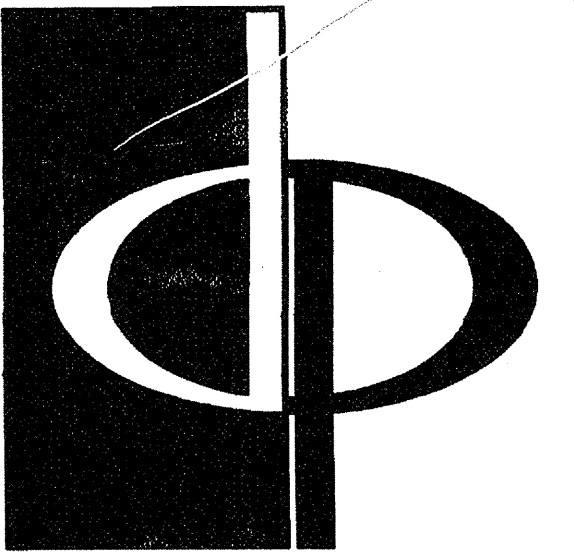
1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
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HVAC SHEET NOTES

- 1 MOUNT AHU PER DETAIL ON SHEET H-6. 3.
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- 3 CONDENSATE DRAIN LINES. ROUTE EXPOSED IN MECHANICAL CLOSET. SEE ROUTING DETAIL ON SHEET H-6. 4.
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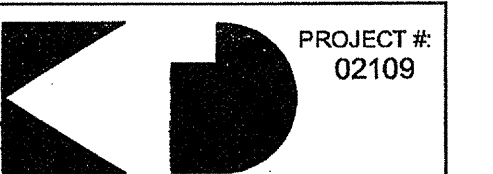


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CONSULTANT

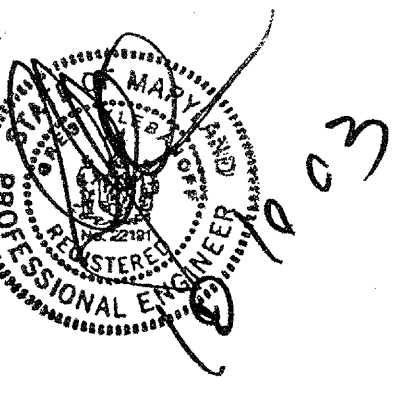


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REAL



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PROJECT

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KENTLANDS

MARYLAND

FOR

ARCHSTONE
COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

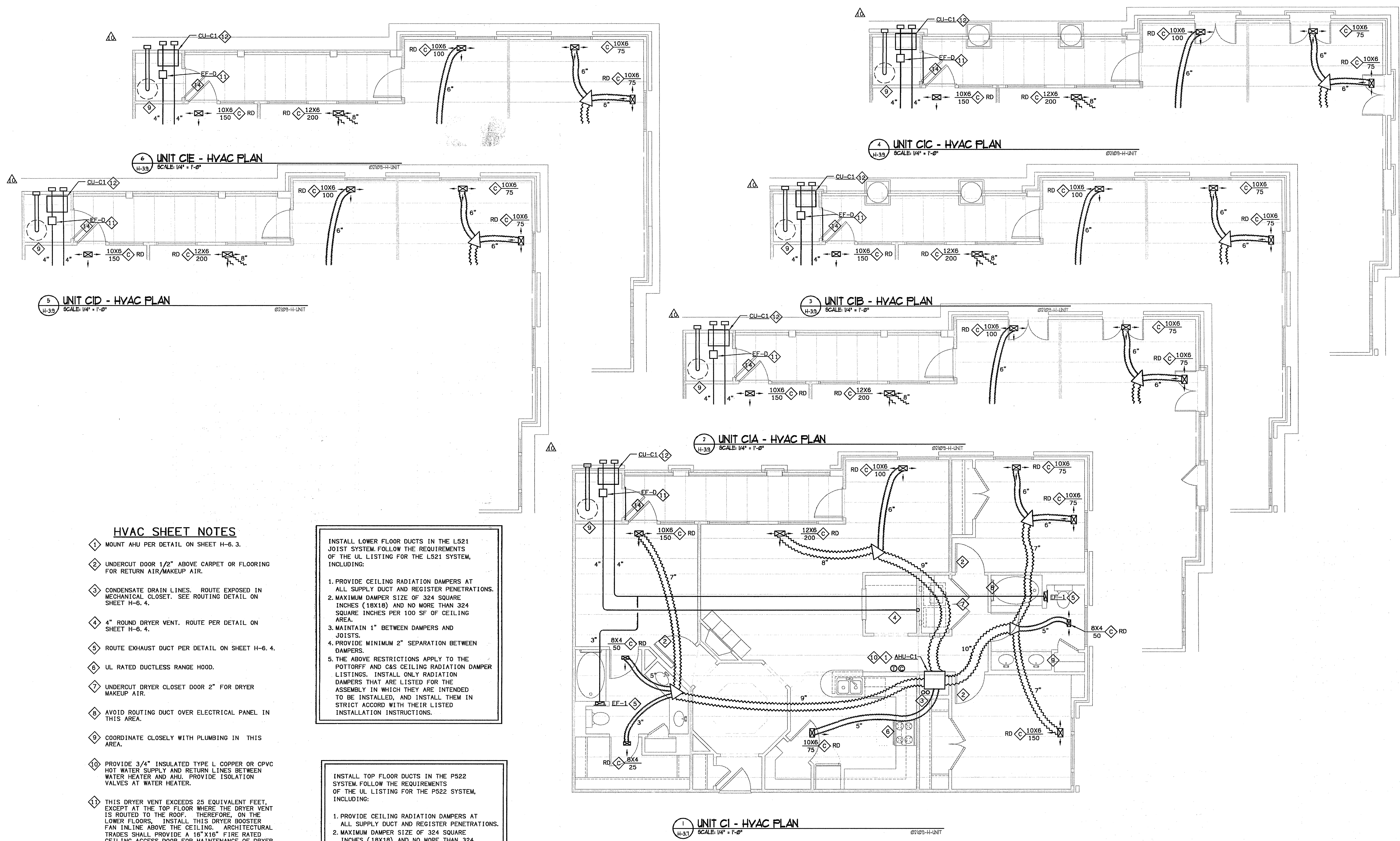
07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION

DATE: 06/10/02
JOB NUMBER: 021102
DRAWN BY: GHK
CHECKED BY: GHK
DRAWING TITLE: GHK

UNIT C1
HVAC PLANS

DRAWING NUMBER: H-3.9

COMMENTS



HVAC SHEET NOTES

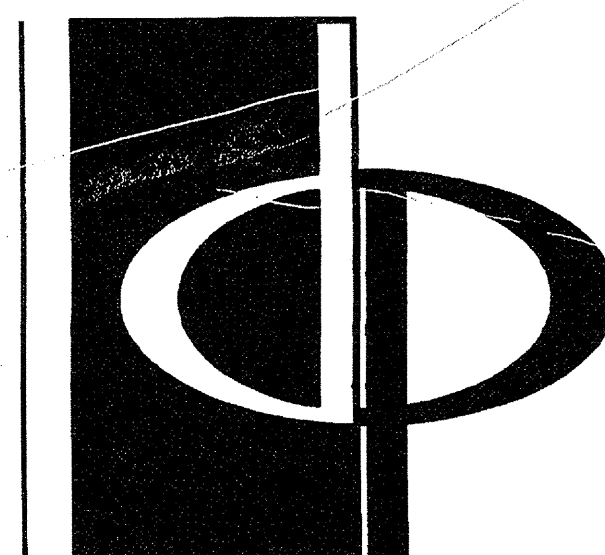
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- 4 4" ROUND DRYER VENT. ROUTE PER DETAIL ON SHEET H-6. 4.
- 5 ROUTE EXHAUST DUCT PER DETAIL ON SHEET H-6. 4.
- 6 UL RATED DUCTLESS RANGE HOOD.
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- 8 AVOID ROUTING DUCT OVER ELECTRICAL PANEL IN THIS AREA.
- 9 COORDINATE CLOSELY WITH PLUMBING IN THIS AREA.
- 10 PROVIDE 3/4" INSULATED TYPE L COPPER OR CPVC HOT WATER SUPPLY AND RETURN LINES BETWEEN WATER HEATER AND AHU. PROVIDE ISOLATION VALVES AT WATER HEATER.
- 11 THIS DRYER VENT EXCEEDS 25 EQUIVALENT FEET, EXCEPT AT THE TOP FLOOR WHERE THE DRYER VENT IS ROUTED TO THE ROOF. THEREFORE, ON THE LOWER FLOORS, INSTALL THIS DRYER BOOSTER FAN IN LINE ABOVE THE CEILING. ARCHITECTURAL TRADES SHALL PROVIDE A 18" X16" FIRE RATED CEILING ACCESS DOOR FOR MAINTENANCE OF DRYER BOOSTER FAN.
- 12 THRU WALL CONDENSING UNIT. SEE SCHEDULE ON SHEET H-6. 1 FOR C.U. TYPE PER UNIT.
- 13 PROVIDE A BAFFLE BEHIND THIS SIDE WALL REGISTER. CUT A HOLE IN THE BAFFLE OF THE SIZE INDICATED TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. MAKE THE BAFFLE FROM FIBERBOARD DUCT. PAINT FLAT BLACK.
- 14 PROVIDE MINIMUM 3" LOUVER IN DOOR.

INSTALL LOWER FLOOR DUCTS IN THE L521 JOIST SYSTEM.FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE L521 SYSTEM, INCLUDING:

1. PROVIDE CEILING RADIATION DAMPERS AT ALL SUPPLY DUCT AND REGISTER PENETRATIONS.
2. MAXIMUM DAMPER SIZE OF 324 SQUARE INCHES (18X18) AND NO MORE THAN 324 SQUARE INCHES PER 100 SF OF CEILING AREA.
3. MAINTAIN 1" BETWEEN DAMPERS AND JOISTS.
4. PROVIDE MINIMUM 2" SEPARATION BETWEEN DAMPERS.
5. THE ABOVE RESTRICTIONS APPLY TO THE POTTORFF AND CAS CEILING RADIATION DAMPER LISTINGS. INSTALL ONLY RADIATION DAMPERS THAT ARE LISTED FOR THE ASSEMBLY IN WHICH THEY ARE INTENDED TO BE INSTALLED, AND INSTALL THEM IN STRICT ACCORD WITH THEIR LISTED INSTALLATION INSTRUCTIONS.

INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM.FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

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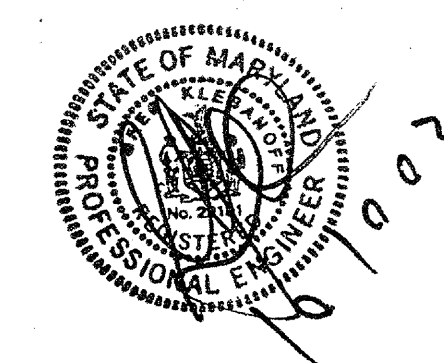
CONSULTANT

PROJECT # 02109

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I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NUMBER 0006 EXPIRATION DATE SEPTEMBER 6, 2009

PROJECT

ARCHSTONE
KENTLANDS

MARYLAND

FOR

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COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02

JOB NUMBER 021102

DRAWN BY GHK

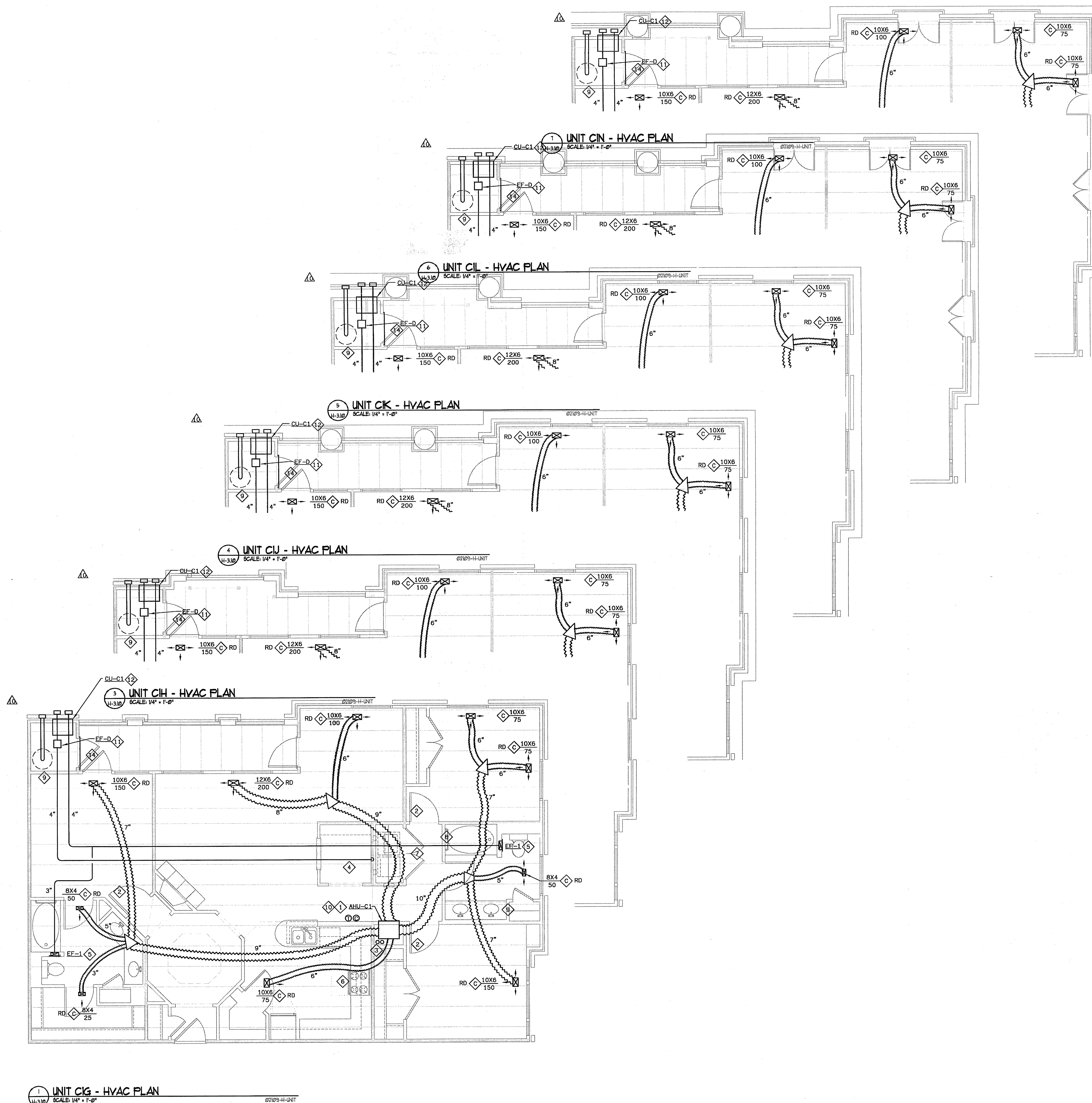
CHECKED BY GHK

DRAWING TITLE UNIT C1

HYAC PLANS

DRAWING NUMBER H-3.10

COMMENTS



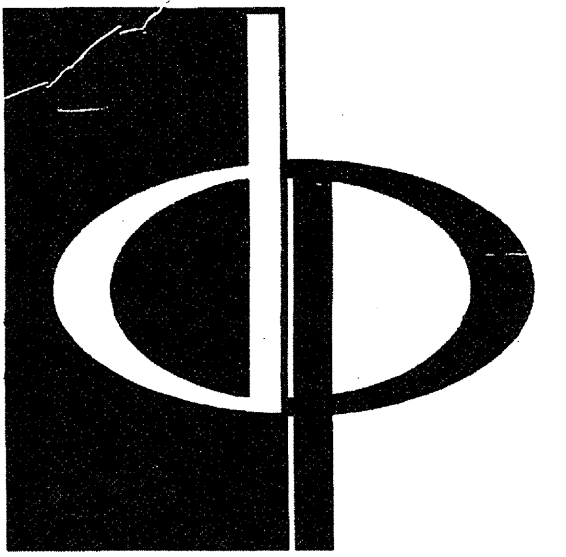
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INSTALL TOP FLOOR DUCTS IN THE P522 SYSTEM. FOLLOW THE REQUIREMENTS OF THE UL LISTING FOR THE P522 SYSTEM, INCLUDING:

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- HVAC SHEET NOTES**
1. MOUNT AHU PER DETAIL ON SHEET H-6. 3.
 2. UNDERCUT DOOR 1/2" ABOVE CARPET OR FLOORING FOR RETURN AIR/MAKEUP AIR.
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CONSULTANT

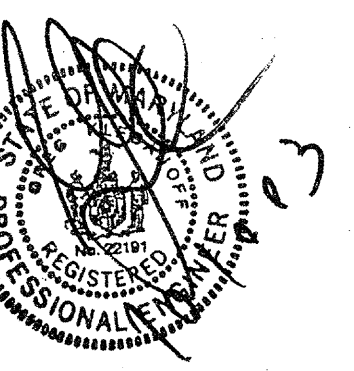


PROJECT #:
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REAL



I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 8848 EXPIRATION DATE SEPTEMBER 9, 2004.

PROJECT

ARCHSTONE
KENTLANDS

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FOR

ARCHSTONE
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404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
10/07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02

JOB NUMBER 021102

DRAWN BY GHK

CHECKED BY GHK

DRAWING TITLE

UNIT B4 & B4A
HVAC PLANS

DRAWING NUMBER

H-3.11

COMMENTS

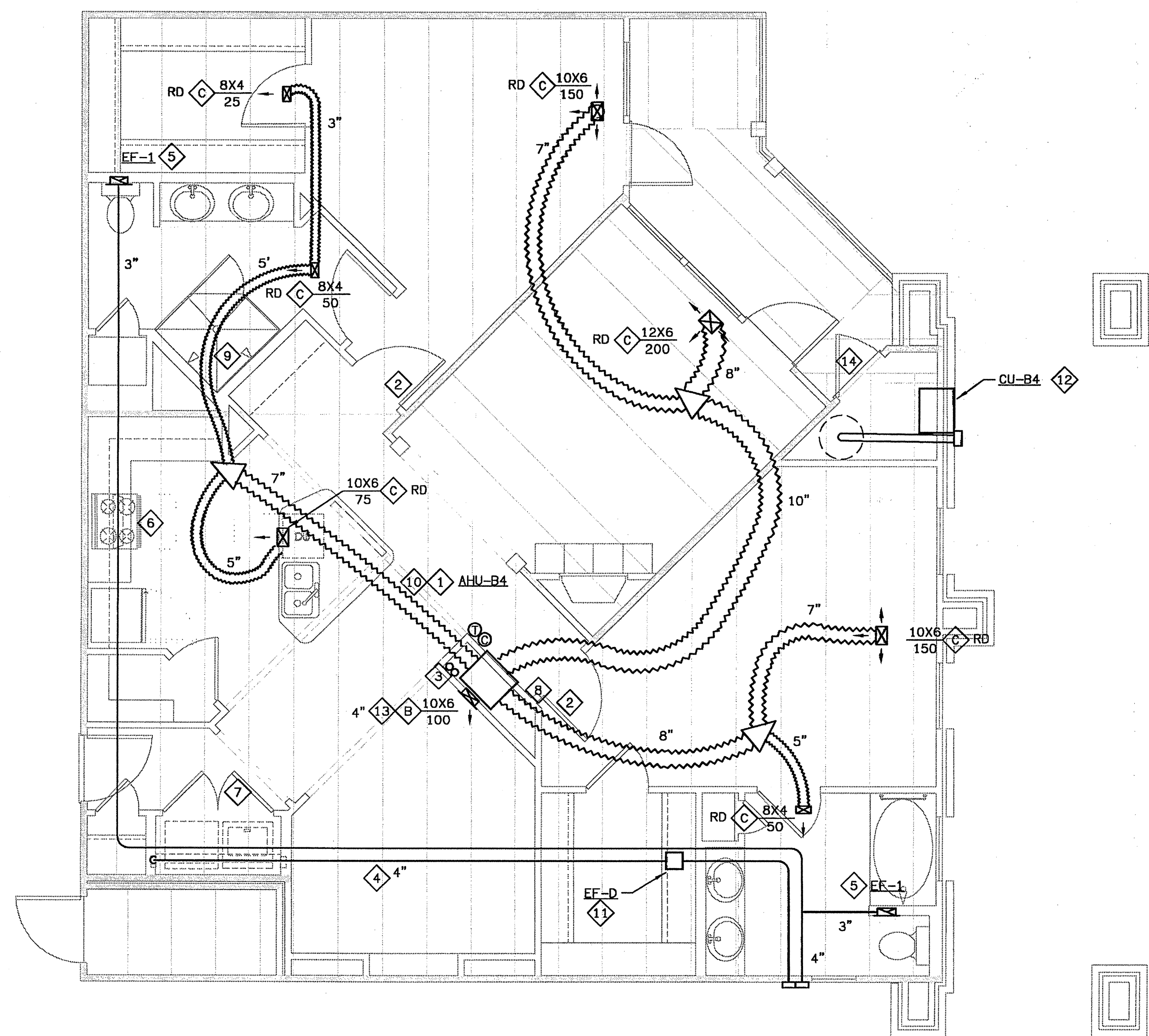
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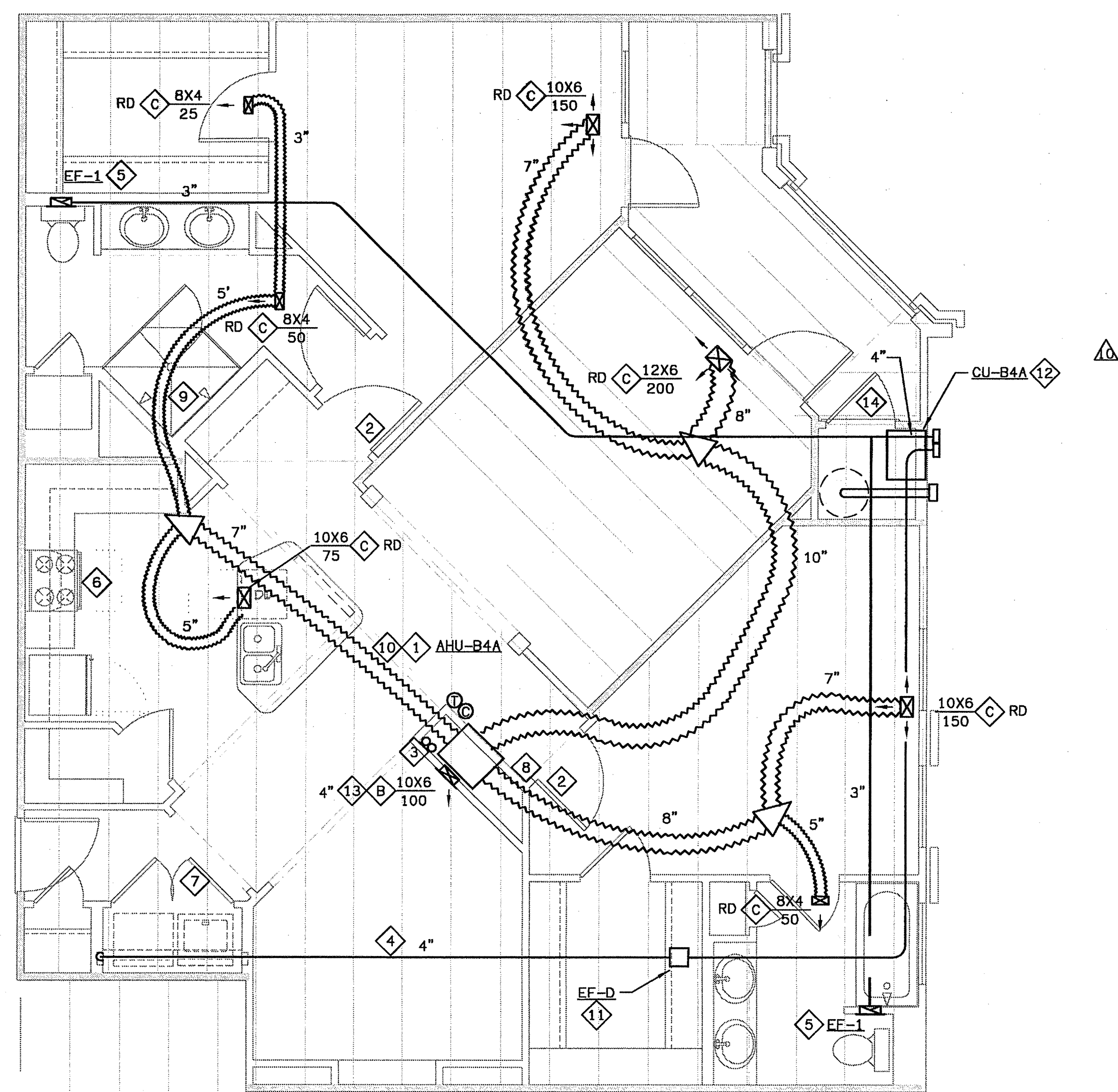
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1 UNIT B4 - HVAC PLAN
SCALE: 1/4" = 1'-0"
07/29-H-UNIT



2 UNIT B4A - HVAC PLAN
SCALE: 1/4" = 1'-0"
07/29-H-UNIT

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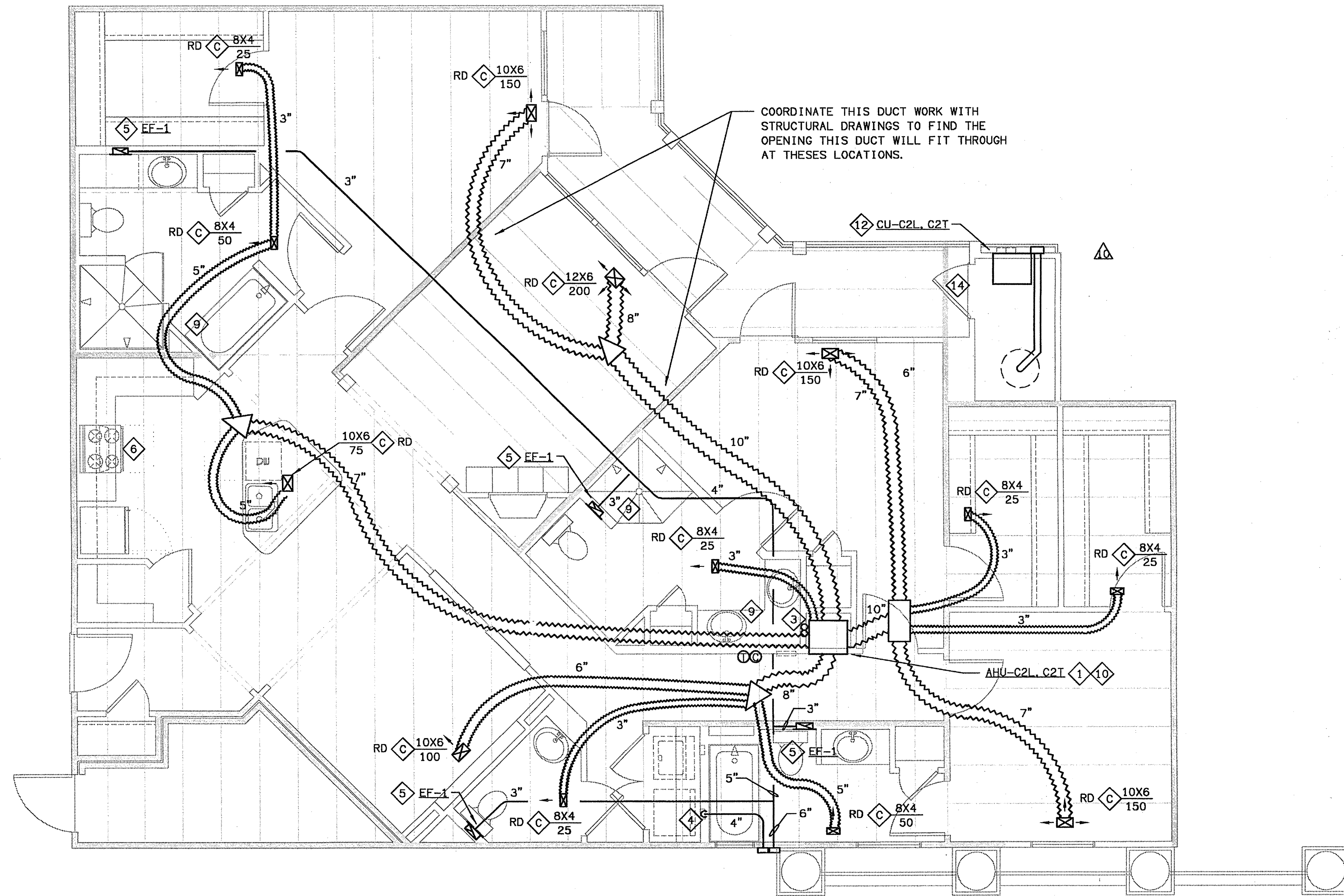
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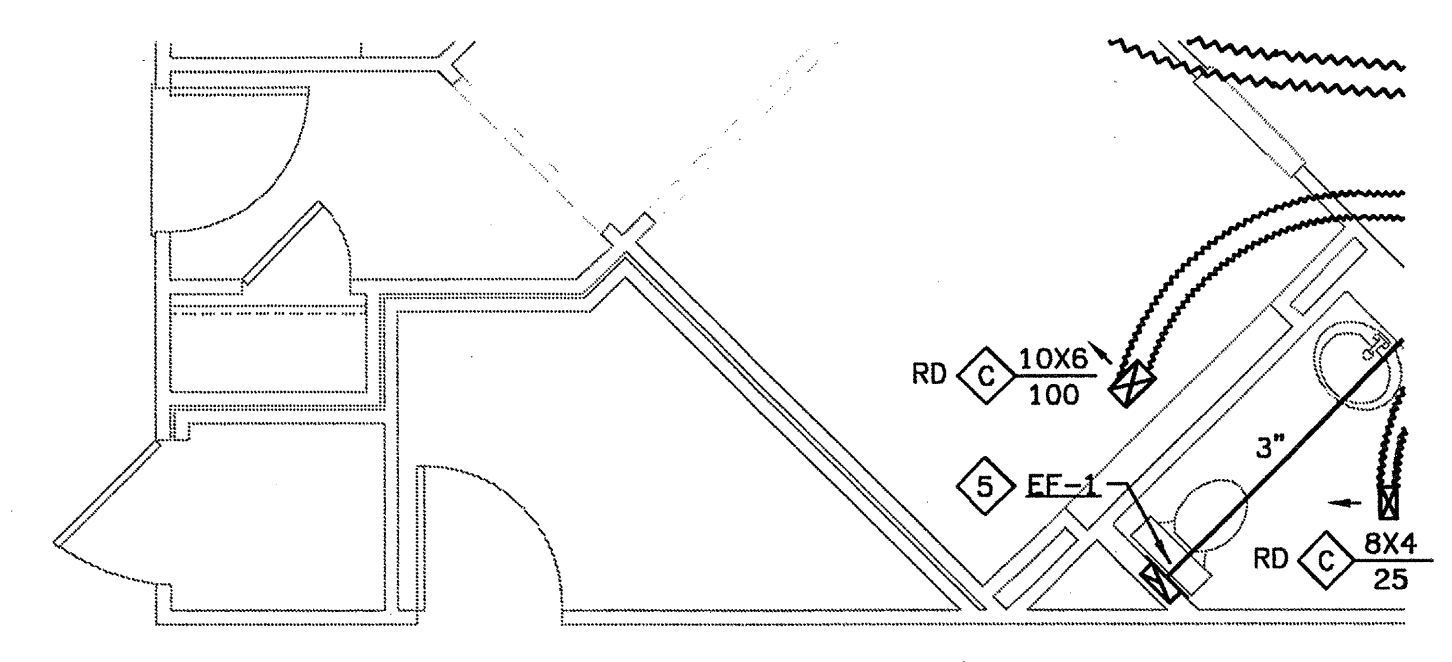
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HVAC SHEET NOTES

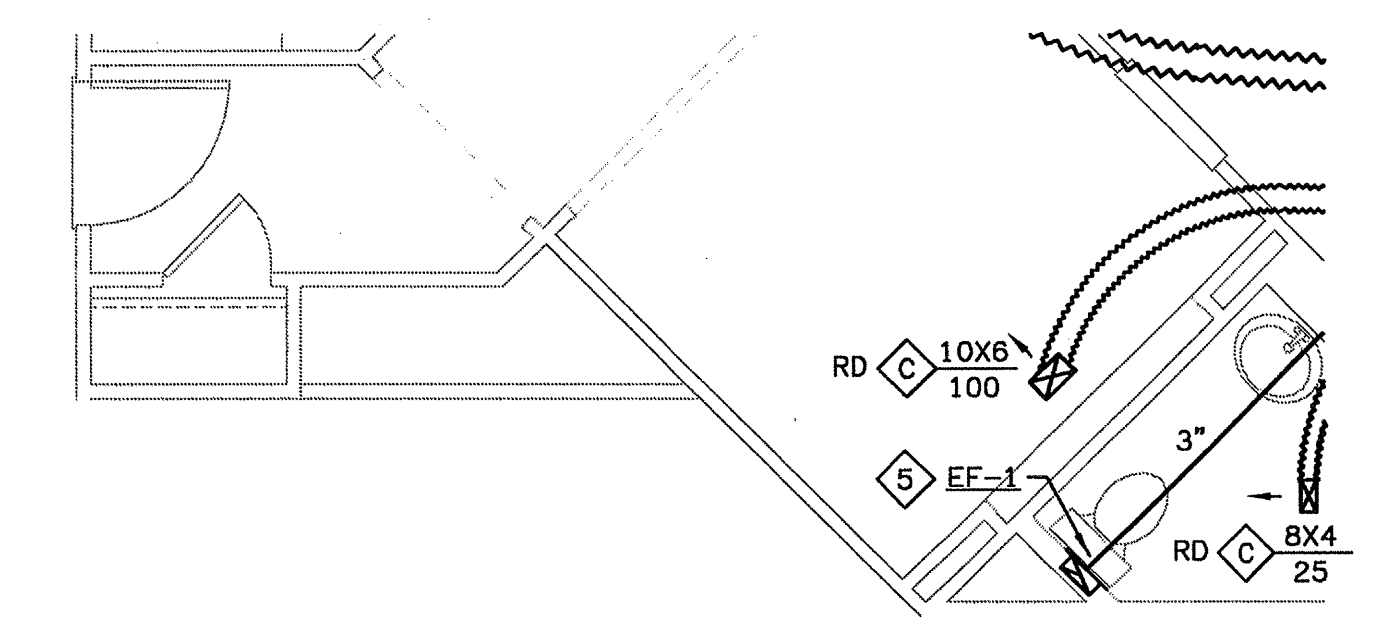
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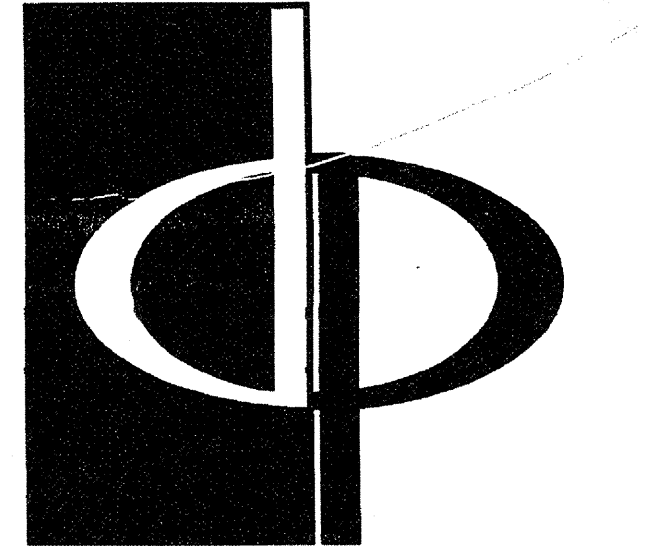
2 UNIT C2 - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



2 UNIT C2A - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT



3 UNIT C2B - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-H-UNIT

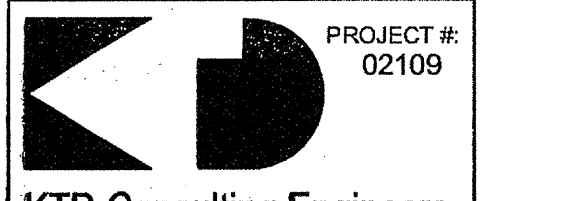


THE PRESTON PARTNERSHIP, LLC
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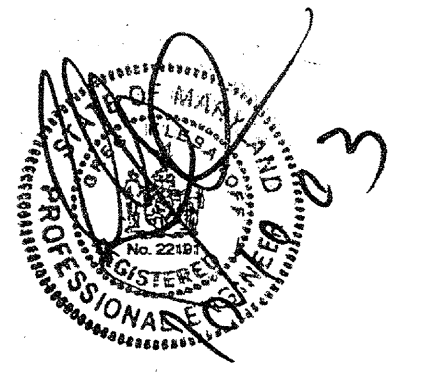
CONSULTANT



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PROJECT

ARCHSTONE
KENTLANDS

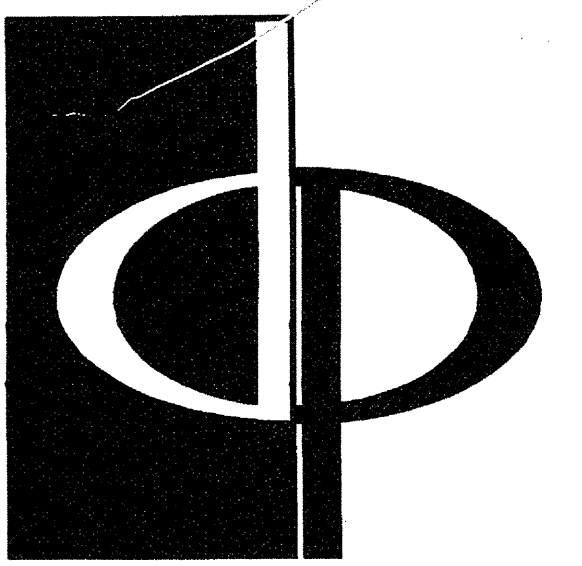
MARYLAND

FOR

ARCHSTONE
COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS
07/18/03 RELEASED FOR CONSTRUCTION
10/07/18/03 RELEASED FOR CONSTRUCTION

DATE: 06/27/02
JOB NUMBER: 0211108
DRAWN BY: GHK
CHECKED BY: GHK
DRAWING TITLE: UNIT C2, C2A & C2B HVAC PLANS
DRAWING NUMBER: H-3.12
COMMENTS:



THE PRESTON PARTNERSHIP, LLC
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PROJECT

ARCHSTONE
KENTLANDS

MARYLAND

FOR

ARCHSTONE COMMUNITIES
Six Piedmont Center, Suite 600
Atlanta, Georgia 30305
404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION

DATE

JOB NUMBER 0610102

DRAWN BY 021108

CHECKED BY GHK

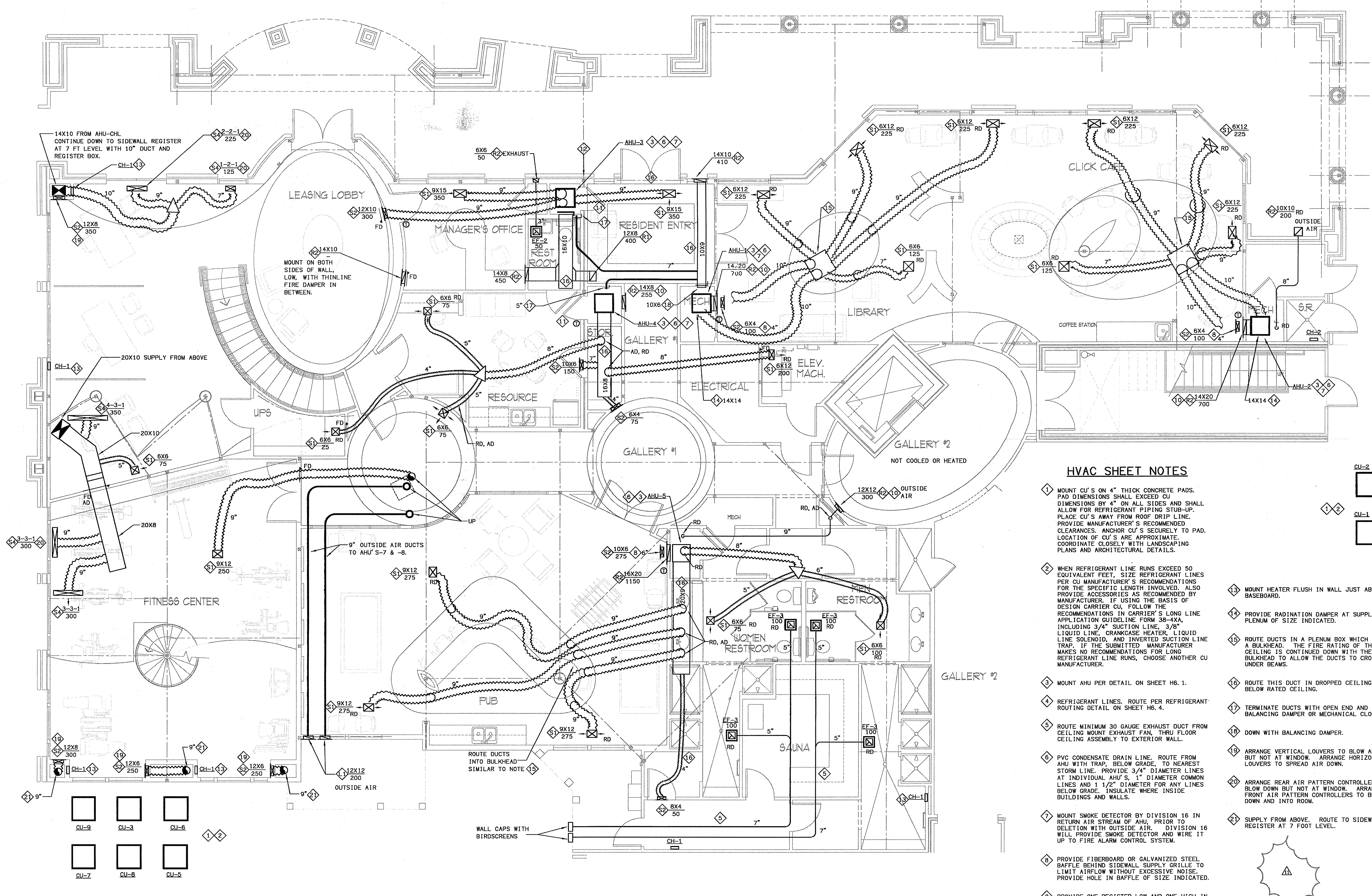
DRAWING TITLE GHK

CLUBHOUSE BASE HYAC PLAN

DRAWING NUMBER

H-3.13

COMMENTS

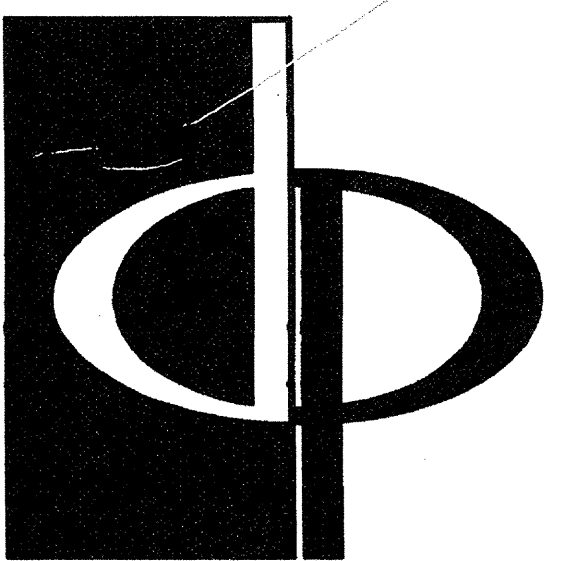


HVAC SHEET NOTES

- 1 MOUNT CU'S ON 4" THICK CONCRETE PADS. PAD DIMENSIONS SHALL EXCEED CU DIMENSIONS BY 4" ON ALL SIDES AND SHALL ALLOW FOR REFRIGERANT PIPING STUB-UP. PLACE CU'S AWAY FROM ROOF DRIP LINE. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES. ANCHOR CU'S SECURELY TO PAD. LOCATION OF CU'S ARE APPROXIMATE. COORDINATE CLOSELY WITH LANDSCAPING PLANS AND ARCHITECTURAL DETAILS.
- 2 WHEN REFRIGERANT LINE RUNS EXCEED 50 EQUIVALENT FEET, SIZE REFRIGERANT LINES PER CU MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIC LENGTH INVOLVED. ALSO PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER. IF USING THE BASIS OF DESIGN CARRIER CU, FOLLOW THE RECOMMENDATIONS IN CARRIER'S LONG LINE APPLICATION GUIDELINE FORM 38-4XA, INCLUDING 3/4" SUCTION LINE, 3/8" LIQUID LINE, CRANKCASE HEATER, LIQUID LINE SOLENOID, AND INVERTED SUCTION LINE TRAP. IF THE SUBMITTED MANUFACTURER MAKES NO RECOMMENDATIONS FOR LONG REFRIGERANT LINE RUNS, CHOOSE ANOTHER CU MANUFACTURER.
- 3 MOUNT AHU PER DETAIL ON SHEET H6. 1.
- 4 REFRIGERANT LINES. ROUTE PER REFRIGERANT ROUTING DETAIL ON SHEET H6. 4.
- 5 ROUTE MINIMUM 30 GAUGE EXHAUST DUCT FROM CEILING MOUNT EXHAUST FAN, THRU FLOOR CEILING ASSEMBLY TO EXTERIOR WALL.
- 6 PVC CONDENSATE DRAIN LINE. ROUTE FROM AHU WITH TRAP, BELOW GRADE, TO NEAREST STORM LINE. PROVIDE 3/4" DIAMETER LINES AT INDIVIDUAL AHU'S, 1" DIAMETER COMMON LINES AND 1 1/2" DIAMETER FOR ANY LINES BELOW GRADE. INSULATE WHERE INSIDE BUILDINGS AND WALLS.
- 7 MOUNT SMOKE DETECTOR BY DIVISION 16 IN RETURN AIR STREAM OF AHU, PRIOR TO DELETION WITH OUTSIDE AIR. DIVISION 16 WILL PROVIDE SMOKE DETECTOR AND WIRE IT UP TO FIRE ALARM CONTROL SYSTEM.
- 8 PROVIDE FIBERBOARD OR GALVANIZED STEEL Baffle BEHIND SIDEWALL SUPPLY GRILLE TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. PROVIDE HOLE IN Baffle OF SIZE INDICATED.
- 9 PROVIDE ONE REGISTER LOW AND ONE HIGH IN WALL AND CONNECT WITH 14X3 GALV STEEL DUCT BETWEEN STUDS.
- 10 MOUNT RETURN REGISTER AT FLOOR LEVEL JUST ABOVE BASEBOARD.
- 11 FULL HEIGHT LOUVERED DOOR. ENSURE THAT ALL MATERIALS WITHIN CLOSET ARE ASTM E-84 25/50 FIRE SMOKE RATED, INCLUDING CONDENSATE DRAIN.
- 12 PROVIDE TWO LAYERS OF TYP X GYPSUM BOARD AROUND ALL PENETRATIONS OF THIS BEARING WALL ABOVE THE CEILING.
- 13 MOUNT HEATER FLUSH IN WALL JUST ABOVE BASEBOARD.
- 14 PROVIDE RADIANATION DAMPER AT SUPPLY PLENUM OF SIZE INDICATED.
- 15 ROUTE DUCTS IN A PLENUM BOX WHICH IS IN A BULKHEAD. THE FIRE RATING OF THE CEILING IS CONTINUED DOWN WITH THE BULKHEAD TO ALLOW THE DUCTS TO CROSS UNDER BEAMS.
- 16 ROUTE THIS DUCT IN DROPPED CEILING SPACE BELOW RATED CEILING.
- 17 TERMINATE DUCTS WITH OPEN END AND BALANCING DAMPER OR MECHANICAL CLOSET.
- 18 DOWN WITH BALANCING DAMPER.
- 19 ARRANGE VERTICAL LOUVERS TO BLOW ALONG BUT NOT AT WINDOW. ARRANGE HORIZONTAL LOUVERS TO SPREAD AIR DOWN.
- 20 ARRANGE REAR AIR PATTERN CONTROLLERS TO BLOW DOWN BUT NOT AT WINDOW. ARRANGE FRONT AIR PATTERN CONTROLLERS TO BLOW DOWN AND INTO ROOM.
- 21 SUPPLY FROM ABOVE. ROUTE TO SIDEWALL REGISTER AT 7 FOOT LEVEL.

1 CLUBHOUSE BASE - HYAC PLAN
SCALE: 1/4" = 1'-0"

0709-4-CLIB



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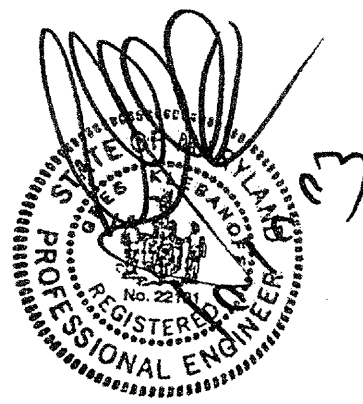
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I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED AND REGISTERED UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER: 9304. EXPIRATION DATE: SEPTEMBER 9, 2009.

PROJECT

ARCHSTONE
KENTLANDS

MARYLAND

FOR

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REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION

DATE

JOB NUMBER 0610102

DRAWN BY 021108

CHECKED BY GHK

DRAWING TITLE GHK

CLUBHOUSE UPPER
HVAC PLAN

DRAWING NUMBER

H-3.14

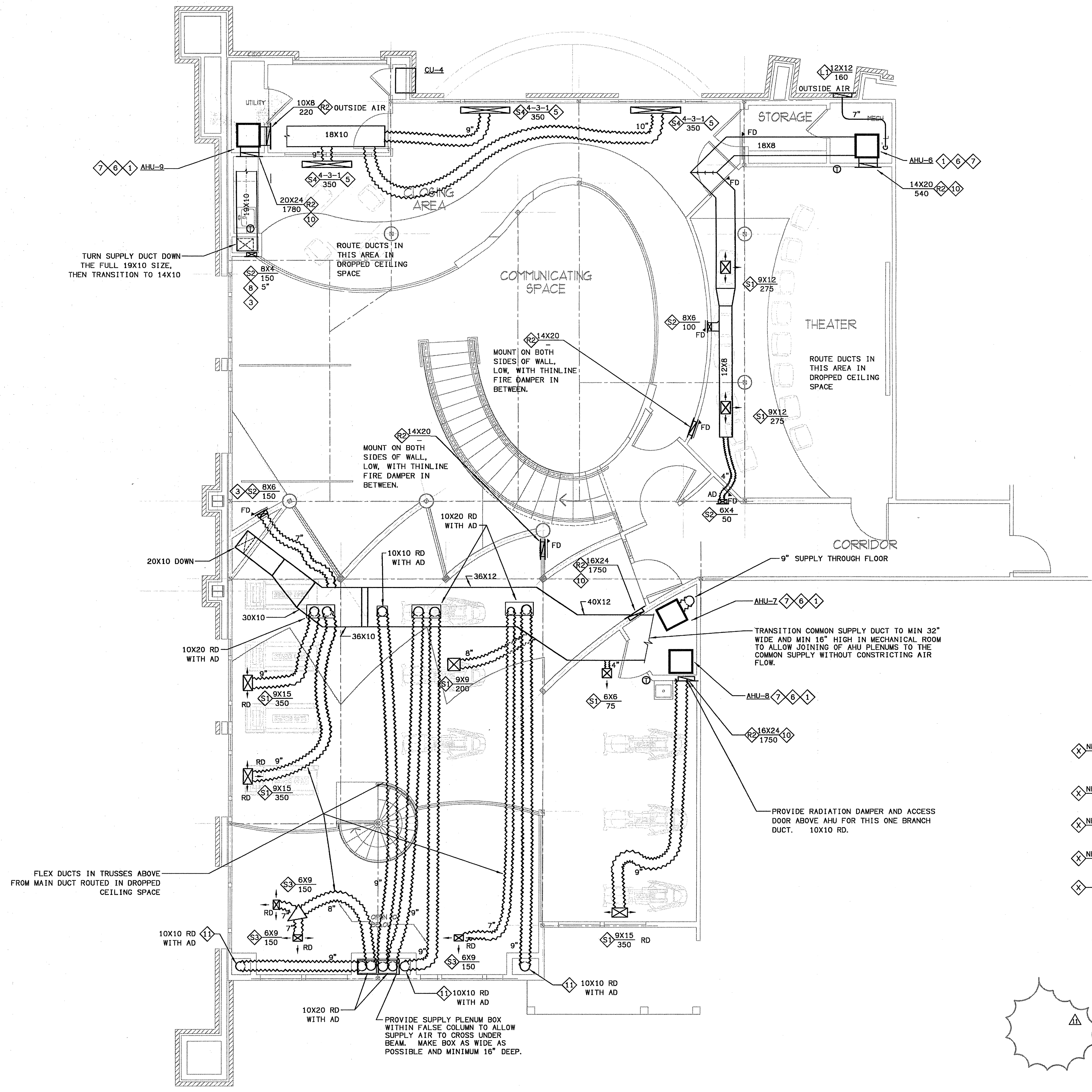
COMMENTS

HVAC SHEET NOTES

- 1 MOUNT AHU PER DETAIL ON SHEET H6.1.
- 2 REFRIGERANT LINES, ROUTE PER REFRIGERANT ROUTING DETAIL ON SHEET H6.4.
- 3 ARRANGE VERTICAL LOUVERS TO BLOW ALONG BUT NOT AT WINDOW. ARRANGE HORIZONTAL LOUVERS TO SPREAD AIR DOWN.
- 4 PROVIDE RADIATION DAMPER AT SUPPLY PLENUM OF SIZE INDICATED.
- 5 ARRANGE REAR AIR PATTERN CONTROLLERS TO BLOW DOWN BUT NOT AT WINDOW. ARRANGE FRONT AIR PATTERN CONTROLLERS TO BLOW INTO ROOM.
- 6 PVC CONDENSATE DRAIN LINE, ROUTE FROM AHU WITH TRAP, BELOW GRADE, TO NEAREST STORM LINE. PROVIDE 3/4" DIAMETER LINES AT INDIVIDUAL AHU'S, 1" DIAMETER COMMON LINES AND 1 1/2" DIAMETER FOR ANY LINES BELOW GRADE. INSULATE WHERE INSIDE BUILDINGS AND WALLS.
- 7 MOUNT SMOKE DETECTOR BY DIVISION 16 IN RETURN AIR STREAM OF AHU, PRIOR TO DELETION WITH OUTSIDE AIR. DIVISION 16 WILL PROVIDE SMOKE DETECTOR AND WIRE IT UP TO FIRE ALARM CONTROL SYSTEM.
- 8 PROVIDE FIBERBOARD OR GALVANIZED STEEL BAFFLE BEHIND SIDEWALL SUPPLY GRILLE TO LIMIT AIRFLOW WITHOUT EXCESSIVE NOISE. PROVIDE HOLE IN BAFFLE OF SIZE INDICATED.
- 9 PROVIDE ONE REGISTER LOW AND ONE HIGH IN WALL AND CONNECT WITH 14X3 GALV STEEL DUCT BETWEEN STUDS.
- 10 MOUNT RETURN REGISTER AT FLOOR LEVEL JUST ABOVE BASEBOARD. DUCT TO THE AHU RETURN.
- 11 SUPPLY DUCT DOWN TO FIRST FLOOR.

HVAC LEGEND

- 20x10 DUCT SIZE IN INCHES. FIRST FIGURE IS SIDE SHOWN. SIZES SHOWN ARE INSIDE DIMENSIONS OF INSULATION IF DUCTWORK IS INTERNALLY INSULATED
- ONE SIDED DUCT EXPANSION OR CONTRACTION WITH FLEX DUCTWORK AND SPIN-IN FITTING AND MANUAL DAMPER
- NECK SIZE CFM CEILING MOUNTED SUPPLY. IF OTHER THAN 4-WAY, ARROWS INDICATE AIR FLOW PATTERN.
- NECK SIZE CFM WALL-MOUNTED SUPPLY REGISTER. WIDTH GIVEN FIRST
- NECK SIZE CFM WALL-MOUNTED RETURN REGISTER. WIDTH GIVEN FIRST
- NECK SIZE CFM CEILING MOUNTED RETURN.
- X-Y-Z CFM LINEAR SLOT DIFFUSER X-LENGTH IN FEET, Y-#OF SLOTS, Z-SLOT WIDTH IN INCHES
- CEILING MOUNTED EXHAUST FAN
- THERMOSTAT
- CARBON MONOXIDE SENSOR. SENSOR SHALL BE VERIS MODEL GW OR EQUIVALENT 24V SUPPLIED BY MECHANICAL CONTRACTOR. SENSOR SHALL HAVE AUDIBLE EXPOSURE ALARM.
- RETURN AIR FIRESTAT
- RD RADIATION DAMPER
- FD FIRE DAMPER. IF IN DUCT, PROVIDE WITH CURTAINS OUT OF AIRSTREAM.
- AD ACCESS DOOR. PROVIDE IN DUCT AND IN WALL OR CEILING FOR FD/RD MAINTENANCE.



1 CLUBHOUSE UPPER - HVAC PLAN
SCALE: 1/4" = 1'-0"
02109-14-CL115

APARTMENT SPLIT SYSTEM AIR CONDITIONER SCHEDULE

MARK	CU-A/AHU-A	CU-A1L/AHU-A1L	CU-B1B/AHU-B1B	CU-B1T/AHU-B1T	CU-B1L/AHU-B1L	CU-B2/AHU-B2	CU-B2L/AHU-B2L	CU-B3/AHU-B3	CU-B3B/AHU-B3B	CU-B4/AHU-B4	CU-B4A/AHU-B4A	CU-B5/AHU-B5	CU-C1/AHU-C1	CU-C2L/AHU-C2L	CU-C2T/AHU-C2T	
TOTAL COOLING LOAD (MBH)	12.0 - 13.9	17.4	23.8	20.7	26.4	17.5 - 19.1	24.4	16.3 - 18.8	18.5	18.2	18.0	24.4	24.9 - 26.7	25.4	28.4	
SENSIBLE COOLING LOAD (MBH)	9.7 - 12.1	14.8	20.0	17.2	22.2	14.0 - 15.9	20.6	12.9 - 15.0	14.1	14.6	14.5	20.6	20.7 - 22.8	20.0	23.3	
AIR HANDLING UNIT	MODEL # (FIRST CO.)	18RAQ-3	24RAQ-3	30RAQ-3	30RAQ-3	30RAQ-3	24RAQ-3	30MRAQ-3	24RAQ-3	24RAQ-3	24RAQ-3	30RAQ-3	30RAQ-3	30RAQ-3	36RAQ-3	
	CONFIGURATION	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	
	DIMENSIONS D X W X H (IN)	16 X 20 X 40	16 X 20 X 40	21 X 24 X 44	21 X 24 X 44	21 X 24 X 44	16 X 20 X 40	23 X 20 X 40	16 X 20 X 40	16 X 20 X 40	16 X 20 X 40	16 X 20 X 40	21 X 24 X 44	21 X 24 X 44	21 X 24 X 44	
	SUPPLY AIR (CFM)	575	775	800	800	975	800	975	775	800	775	875	925	1140	1230	
	EXTERNAL STATIC PRESS. (IN W.C.)	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	
	ENTERING AIR DRY BULB (DEG. F.)	75	75	75	75	75	75	75	75	75	75	75	75	75	75	
	ENTERING AIR WET BULB (DEG. F.)	65	65	65	65	65	65	65	65	65	65	65	65	65	65	
EVAPORATOR FAN	HP	1/3	1/3	1/3	1/3	1/3	1/5	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/2	
	VOLT/Ø	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	120/1	
	LOAD (MBH)	12.9 - 18.0	19.7	26.4	20.3	26.4	20.6 - 26.4	27.2	22.7 - 27.1	25.3	26.7	30.5	28.3 - 34.3	31.6	32.0	
HYDRONIC HEAT	GPM	3	3	3	3	3	3.5	3	3	3	3	3	3	3	3	
	ENT. WATER TEMP.	140°	140°	140°	140°	140°	140°	140°	140°	140°	140°	140°	140°	140°	140°	
CONDENSING UNIT	MANUFACTURER	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	NATIONAL COMFORT PRODUCTS	CARRIER	
	MODEL #	NCPB018-3010	NCPB024-3010	NCPB030-3010	NCPB024-3010	NCPB030-3010	NCPB024-3010	NCPB030-3010	NCPB024-3010	NCPB030-3010	NCPB024-3010	NCPB030-3010	NCPB030-3010	NCPB030-3010	38CKC036	
	MOUNT TYPE	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	THRU WALL	GROUND MOUNTED	
	DIMENSIONS L X W X H (IN.)	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	19 X 24 X 32	N/A
	NOMINAL TONS	1.5	2.0	2.5	2.0	2.5	2.0	2.5	2.0	2.0	2.0	2.5	2.5	2.5	3.0	
	MINIMUM EFFICIENCY AT ARI	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER	10 SEER
APARTMENT TYPES SERVED	A1, A2, A3	A1 LOFT	B1 BOTTOM FLOOR	B1 UPPER FLOORS	B1 LOFT	B2	B2 LOFT	B3	B3B	B4	B4A	B5	C1	C2 LOWER UNITS	C2 TOP UNITS	
REMARKS	1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 8, 10 1 THRU 9															

- EXTERNAL STATIC PRESSURE EXCLUDES LOSSES DUE TO AHU CASING, DIRT ON FILTER, AND WET COOLING COIL.
- PROVIDE WITH HEATING, COOLING THERMOSTAT.
- 95° F. OUTSIDE AIR AMBIENT FOR THRU WALL CU'S & 100° F FOR ROOF MOUNT CU'S.
- COOLING LOADS EXCLUDE EVAPORATOR FAN HEAT.
- PROVIDE WITH 5 MINUTE TIME DELAY RELAY TO PREVENT COMPRESSOR FROM SHORT CYCLING.
- ALTERNATE MANUFACTURERS AND MODELS WILL BE REVIEWED. THERE MAY BE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL CHANGES RESULTING FROM THE ALTERNATES. THE COST OF IMPLEMENTING AND ENGINEERING THESE CHANGES SHALL BE BORNE BY THE MECHANICAL SUBCONTRACTOR.
- WIRE AHU FAN HIGH SPEED.
- PROVIDE AHU WITH INTEGRAL ACCESS DOOR FOR RETURN AIR & MAINTENANCE.
- THIS C.U. IS GROUND MOUNTED, NOT THRU WALL.
- CONDENSOR GRILLE SHALL BE FACTORY PAINTED TO MATCH EXTERIOR COLOR.

- ### HVAC GENERAL NOTES
- COAT INSIDE OF DUCTS AND PORTIONS OF CEILING ASSEMBLY VISIBLE THROUGH GRILLES OR REGISTERS WITH FLAT BLACK ASTM E-84 25/30 MATERIAL.
 - PIPE AND DUCT ROUTING SHOWN IS SCHEMATIC. PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS, INCLUDING DIVIDED DUCTS, REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES AS ENCOUNTERED IN THE FIELD.
 - COORDINATE WITH ALL OTHER TRADES PRIOR TO PURCHASING OR INSTALLING EQUIPMENT AND MATERIALS.
 - ASSEMBLE DRYER DUCTS WITHOUT SHEET METAL SCREWS OR OTHER FASTENERS EXTENDING INTO DUCT. RUN EACH JOINT IN THE DIRECTION OF AIR FLOW SO AS NOT TO CATCH LINT. SEAL JOINTS WITH NON COMBUSTIBLE MATERIAL.
 - COORDINATE ALL HVAC SYSTEM DRAWINGS WITH TRUSS MANUFACTURER DURING SHOP DRAWING REVIEW TO AVOID INTERFERENCES BETWEEN MECHANICAL SYSTEMS AND ROOF STRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH TRUSS INTERFERENCES THAT OCCUR IN THE FIELD DURING CONSTRUCTION. COORDINATE IN ADVANCE. DUCT SIZES MAY BE REVISED TO FIT TRUSS SYSTEM SO LONG AS THE EQUIVALENT INSIDE CROSS-SECTIONAL AREA IS NOT DECREASED.
 - ALL CONTROL WIRING AND CONDUIT SHALL COMPLY WITH NEC AND DIVISION 16 SPECIFICATIONS.
 - PROVIDE MINIMUM 30 GAUGE GALVANIZED STEEL ROUND EXHAUST DUCT. FLEXIBLE ALUMINUM IS ALLOWED FOR BATH EXHAUST ONLY, AND ONLY 5FT FROM FIRE RATED PENETRATIONS.
 - SLEEVE AND FIRE STOP PENETRATIONS THROUGH FIRE RATED SYSTEMS TO MAINTAIN RATING OF SYSTEM. USE MINIMUM GALVANIZED STEEL GAGE DUCT AS REQUIRED TO MAINTAIN RATING OF SYSTEM.
 - LOCATE WALL AND ROOF TERMINATIONS AT THE SAME RELATIVE ELEVATION AND HORIZONTAL POSITION TO MAINTAIN A UNIFORM APPEARANCE. WHEN IN DOUBT, COORDINATE PLACEMENT WITH THE ARCHITECT. PRIME COAT AND PAINT EXTERIOR TERMINATIONS TO MATCH BUILDING COLOR.
 - PROVIDE MATERIALS WHICH HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS WHEN TESTED IN ACCORD WITH ASTM E84.
 - INSULATE SUPPLY AND RETURN DUCTS TO A MINIMUM R-VALUE OF 6.0 UNLESS INSTALLED IN A MECHANICALLY COOLED SPACE OR BETWEEN COOLED FLOORS IN A CAVITY WHOSE EXTERIOR WALLS ARE INSULATED, IN WHICH CASE THE R-VALUE MAY BE 4.2.
 - COORDINATE CEILING MOUNTED AIR DEVICE LOCATIONS WITH REFLECTED CEILING PLAN AND OTHER TRADES.
 - IN HANDICAPPED ACCESSIBLE AREAS, MOUNT CONTROLS AT 48" ABOVE FINISHED FLOOR.
 - PROVIDE 12X12 ACCESS DOOR IN EACH AHU PLENUM IN WHICH A RADIATION DAMPER IS INSTALLED. PROVIDE ACCESS DOOR WITH FRAME. PROVIDE AIR TIGHT. PROVIDE THESE DUCT ACCESS DOORS AT OTHER LOCATIONS AS REQUIRED FOR DAMPER MAINTENANCE.
 - ROUTE OUTSIDE AIR DUCTS AS GALVANIZED STEEL, EXTERNALLY INSULATED WHERE IN JOIST SPACE OR WHERE IN OCCUPIABLE SPACE.

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10/03

I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 0848 EXPIRES 09/30/2004

PROJECT ARCHSTONE KENTLANDS

MARYLAND

FOR

ARCHSTONE COMMUNITIES
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REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION

09/15/03 AMENITY AREA REVISION

DATE 06/10/02

JOB NUMBER

DRAWN BY 021108

CHECKED BY GHK

DRAWING TITLE GHK

DRAWING NUMBER

COMMENTS H-6.1

CLUBHOUSE SPLIT SYSTEM HEAT PUMP SCHEDULE

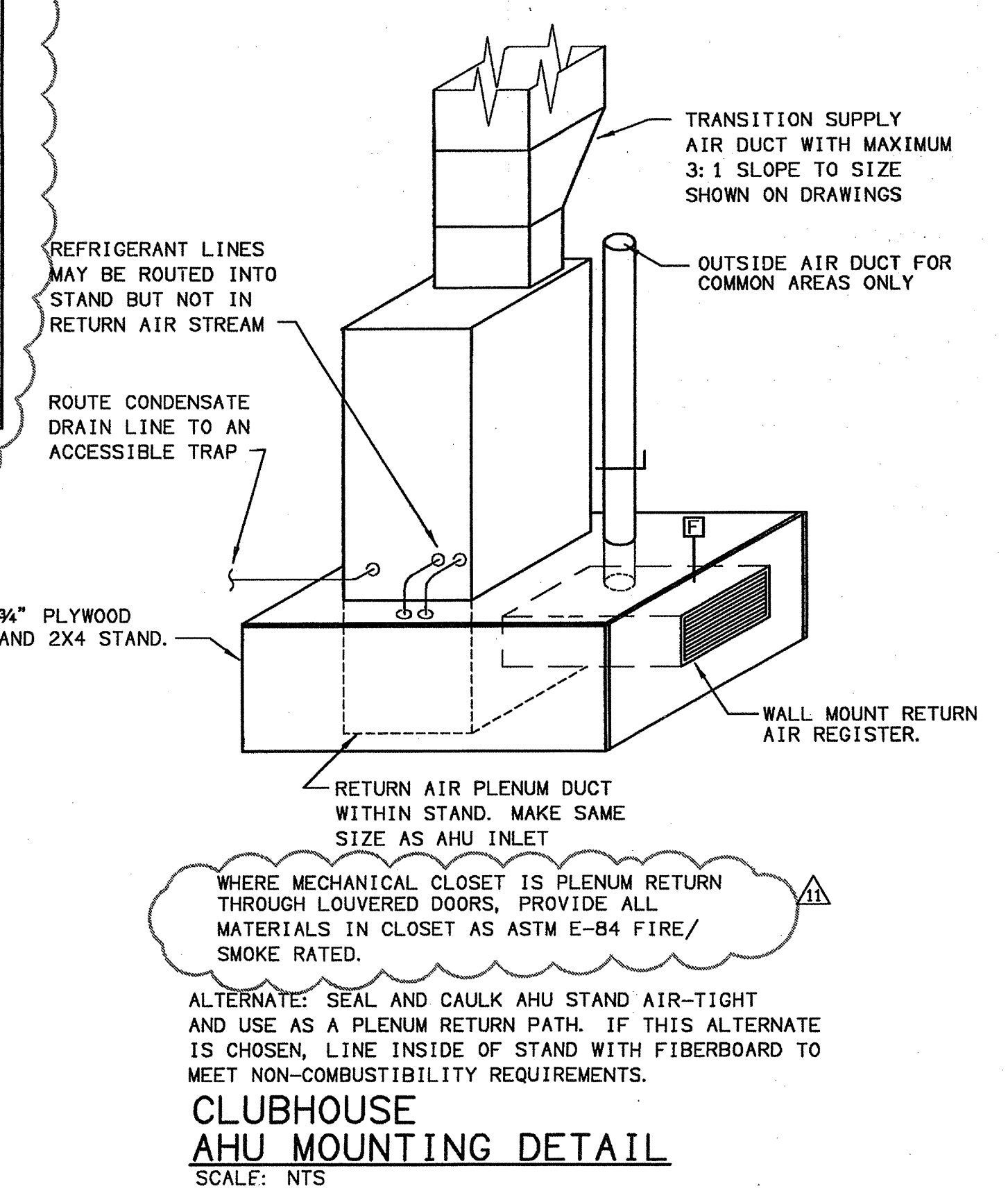
MARK	CU-1/AHU-1	CU-2/AHU-2	CU-3/AHU-3	CU-4/AHU-4	CU-5/AHU-5	CU-6/AHU-6	CU-7/AHU-7	CU-8/AHU-8	CU-9/AHU-9
NOMINAL TONS OF CU	2.5	2.5	2.5	1.5	4	2	5.0	5.0	5.0
TOTAL COOLING LOAD (MBH)	25.3	25.3	23.1	12.6	40.1	16.8	52.7	52.7	44
SENSIBLE COOLING LOAD (MBH)	19.8	19.8	20.0	10.6	29.9	11.4	39.3	39.3	40
AHU CONFIGURATION	VERTICAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL	VERTICAL
AHU DIMENSIONS D X W X H (IN)	22 X 18 X 48	22 X 18 X 48	22 X 18 X 48	22 X 15 X 43	22 X 22 X 50	22 X 15 X 43	22 X 22 X 54	22 X 22 X 54	22 X 22 X 54
SUPPLY AIR/OUTSIDE AIR (CFM)	900/200	900/200	1000/150	600/60	1350/300	700/160	1950/200	1950/200	2000/220
EXTERNAL STATIC PRESS. (IN. W.C.)	.4	.4	.35	.4	.4	.4	.4	.4	.4
ENTERING AIR DRY BULB (°F.)	78	78	77	76	78	79	77	77	77
ENTERING AIR WET BULB (°F.)	66	66	65	64	67	67	66	66	66
EVAPORATOR FAN	HP	1/3	1/3	1/3	1/5	3/4	1/4	3/4	3/4
	VOLT/Ø	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1
ELECTRIC HEAT	LOAD (MBH)	17.7	17.7	18.0	3.6	29	10.6	36	34
	KW @ 240	8	8	8	5	8	5	5	5
CONDENSING UNIT	VOLT/Ø/STAGES	208/1/1	208/1/1	208/1/1	208/1/1	208/1/1	208/1/1	208/1/1	208/1/1
	VOLT/Ø	208/1	208/1	208/1	208/1	208/1	208/1	208/1	208/1
SERVES	LIBRARY	CAFE	MANAGER/ENTRIES	INTERIOR SPACES	PUB	THEATER	FITNESS	FITNESS	LEASING/CLOSING
MANUFACTURER	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL	CARRIER OR EQUAL
AHU MODEL #	FB4ANF030	FB4ANF030	FB4ANF030	FB4ANF018	FB4ANF048	FB4ANF024	FB4ANF060	FB4ANF060	FB4ANF060
CU MODEL #	3BYKCO30	3BYKCO30	3BYKCO30	NCPB018-3010 SEE REMARK 10	3BYKCO48	3BYKCO24	3BYKCO60	3BYKCO60	3BYKCO60
MINIMUM EFFICIENCY AT ARI	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF	10 SEER/6.8 HSPF
REMARKS	1 THRU B 1 THRU 8 1 THRU 8 1 THRU 7, 9 1 THRU 8 1 THRU 8 1 THRU 8 1 THRU 8 1 THRU 8								

- EXTERNAL STATIC PRESSURE EXCLUDES LOSSES DUE TO AHU CASING, DIRT ON FILTER, AND WET COOLING COIL.
- PROVIDE WITH 7-DAY PROGRAMMABLE HEAT PUMP THERMOSTAT.
- 95° F. OUTSIDE AIR AMBIENT.
- COOLING LOADS EXCLUDE EVAPORATOR FAN HEAT.
- PROVIDE WITH 5 MINUTE TIME DELAY RELAY TO PREVENT COMPRESSOR FROM SHORT CYCLING.
- ALTERNATE MANUFACTURERS AND MODELS WILL BE REVIEWED. THERE MAY BE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL CHANGES RESULTING FROM THE ALTERNATES. THE COST OF IMPLEMENTING AND ENGINEERING THESE CHANGES SHALL BE BORNE BY THE MECHANICAL SUBCONTRACTOR.
- WIRE AHU FAN TO LOWEST SPEED WHICH CAN ACHIEVE DESIGN AIR FLOW.
- CU AND RESISTANCE HEATER WILL OPERATE SIMULTANEOUSLY.
- PROVIDE WITH LOW AMBIENT CONTROLS FOR COOLING OPERATION DOWN TO 0° F.
- THIS IS A NATIONAL COMFORT PRODUCTS NON-HEAT PUMP TYPE CONDENSING UNIT. THRU WALL MOUNT AND OF THE SAME MAKE AND MODEL AS IS DESIGNED FOR THE APARTMENTS.

CLUBHOUSE AIR DEVICE SCHEDULE

MARK	MANUFACTURER MODEL #	DESCRIPTION	OSD	MOUNTING	COLOR	MATERIAL	REMARKS
①	METALAIR 5500	FIXED LOUVERED DIFFUSER-HIGH INDUCTION REGISTER WITH ROLL-FORMED ADJUSTABLE VERTICAL AND HORIZONTAL BLADES	Y	SURFACE CEILING	SEE NOTE 6	STEEL OR ALUMINUM	1, 2, 3, 4, 6, 7
②	METALAIR 5900	FIXED LOUVERED DIFFUSER-LOWER INDUCTION	Y	WALL	SEE NOTE 6	STEEL OR ALUMINUM	1, 3, 4, 5, 6, 7
③	METALAIR 6000	LINEAR SLOT DIFFUSER	Y	SURFACE CEILING	SEE NOTE 6	ALUMINUM	1, 2, 3, 4, 6, 7
④	METALAIR RHD	LOUVERED RETURN 45° BLADE ANGLE	Y	SURFACE CEILING	SEE NOTE 6	STEEL OR ALUMINUM	1, 3, 4
⑤	METALAIR HBD	HEAVY GAUGE LOUVERED RETURN 45° BLADE ANGLE	Y	WALL OR CEILING	SEE NOTE 6	ALUMINUM	1, 3, 4, 5
⑥	RUSKIN ELF-375DX	4" DEEP FLANGED FRAME DRAINABLE LOUVER	N	EXTERIOR WALL	SEE NOTE 6	ALUMINUM	1, 4, 5

- SEE HVAC PLANS FOR NECK SIZES AND CFMS.
- 4-WAY UNLESS NOTED OTHERWISE ON PLAN BY ARROWS.
- MAXIMUM PRESSURE DROP OF .06 IN WC.
- TRANSITION ROUND FLEXIBLE OR RECTANGULAR RIGID DUCTWORK TO DIFFUSERS AS REQUIRED.
- HORIZONTAL DIMENSION GIVEN FIRST.
- CONSULT ARCHITECT FOR REQUIRED COLOR.
- STEEL MUST BE USED WHERE MOUNTED IN FIRE RATED MEMBRANE.
- PROVIDE ADJUSTABLE AIR PATTERN CONTROLLERS.



DATE 06/10/02

JOB NUMBER

DRAWN BY 021108

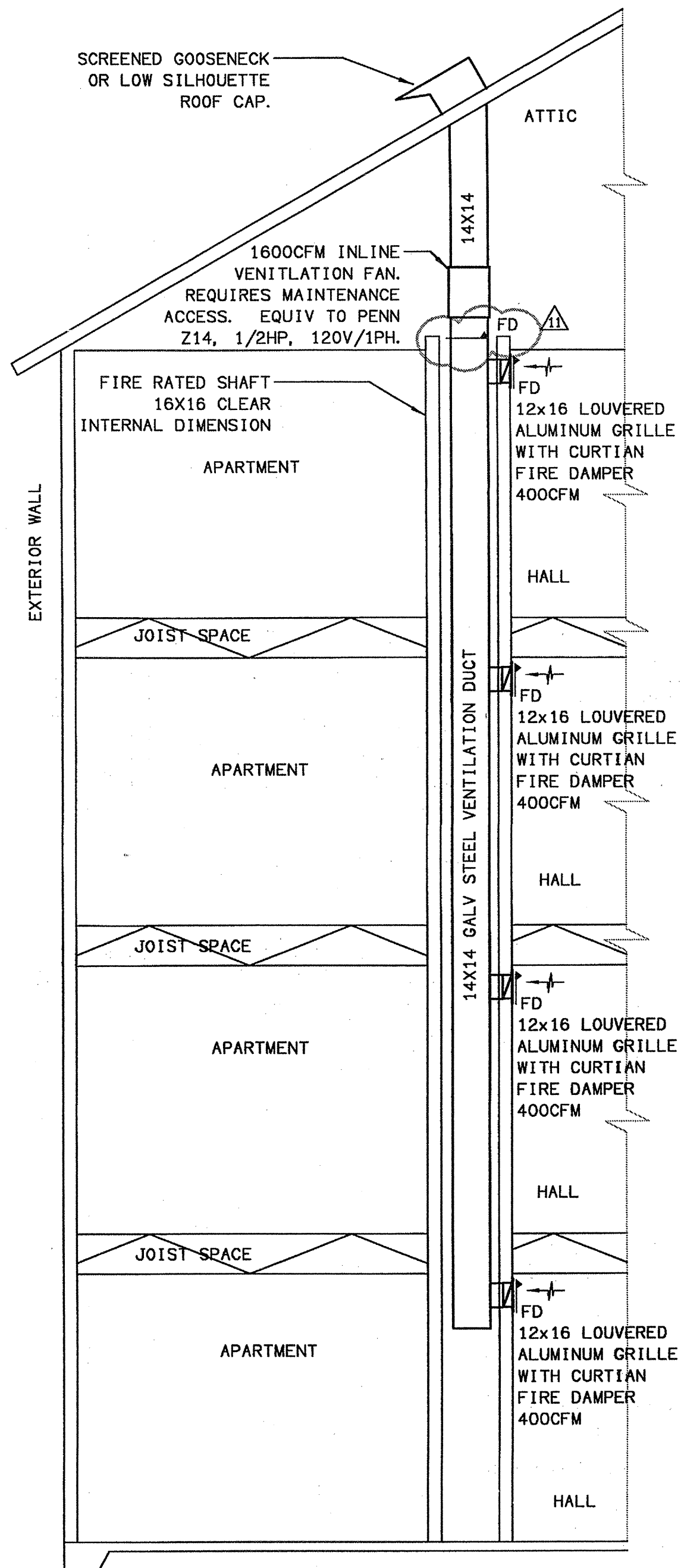
CHECKED BY GHK

DRAWING TITLE GHK

DRAWING NUMBER

COMMENTS H-6.1

9/20



HALLWAY VENTILATION
SCALE: NTS

BID ALTERNATE:

1. ASSUMES STAIRWELLS WILL BE OPEN AND WILL BE THE SOURCE OF MAKEUP AIR.
2. 400CFM IS ADEQUATE TO VENTILATE ABOUT 800 SQUARE FEET OF HALLWAY PER FLOOR (2400 SQUARE FEET TOTAL) OR ABOUT 130 LINEAR FEET OF HALLWAY PER FLOOR.
3. THE EXHAUST FAN COULD ALSO BE MOUNTED ON THE ROOF AS A MUSHROOM TYPE FAN WITH SLOPED CURB. MAINTENANCE ACCESS TO THE ROOF WOULD HAVE TO BE PROVIDED.
4. PROVIDE THERMOSTAT IN TOP FLOOR HALL TO OPERATE FAN AT 80°F AND ABOVE.

DRYER BOOSTER FAN SCHEDULE									
MARK	MANUFACTURER TYPE & MODEL	CFM	E. S. P.	DRIVE	ELECTRICAL WATTS	VOLT/ PHASE	MOUNTING	MAX SONES	REMARKS
EF-D	FANTECH DBF110	113	.6	DIRECT	78	115/1	IN-LINE	7	1, 2, 3, 4, 5

1. PROVIDE WITH UNIT MOUNTED DISCONNECT.
2. PROVIDE WITH PRESSURE SWITCH TO TURN FAN ON AND OFF AUTOMATICALLY WITH DRYER. TEN MINUTES ON DELAY.
3. PROVIDE A MINIMUM OF 14 FEET OF DUCT BETWEEN FAN AND DRYER OUTLET TO PREVENT LINT ENTRAPMENT.

4. PROVIDE WITH BACKWARD INCLINED BLADES AND TEFC MOTOR.
5. UL LISTED FOR USE IN LINT LADEN AIR STREAM.

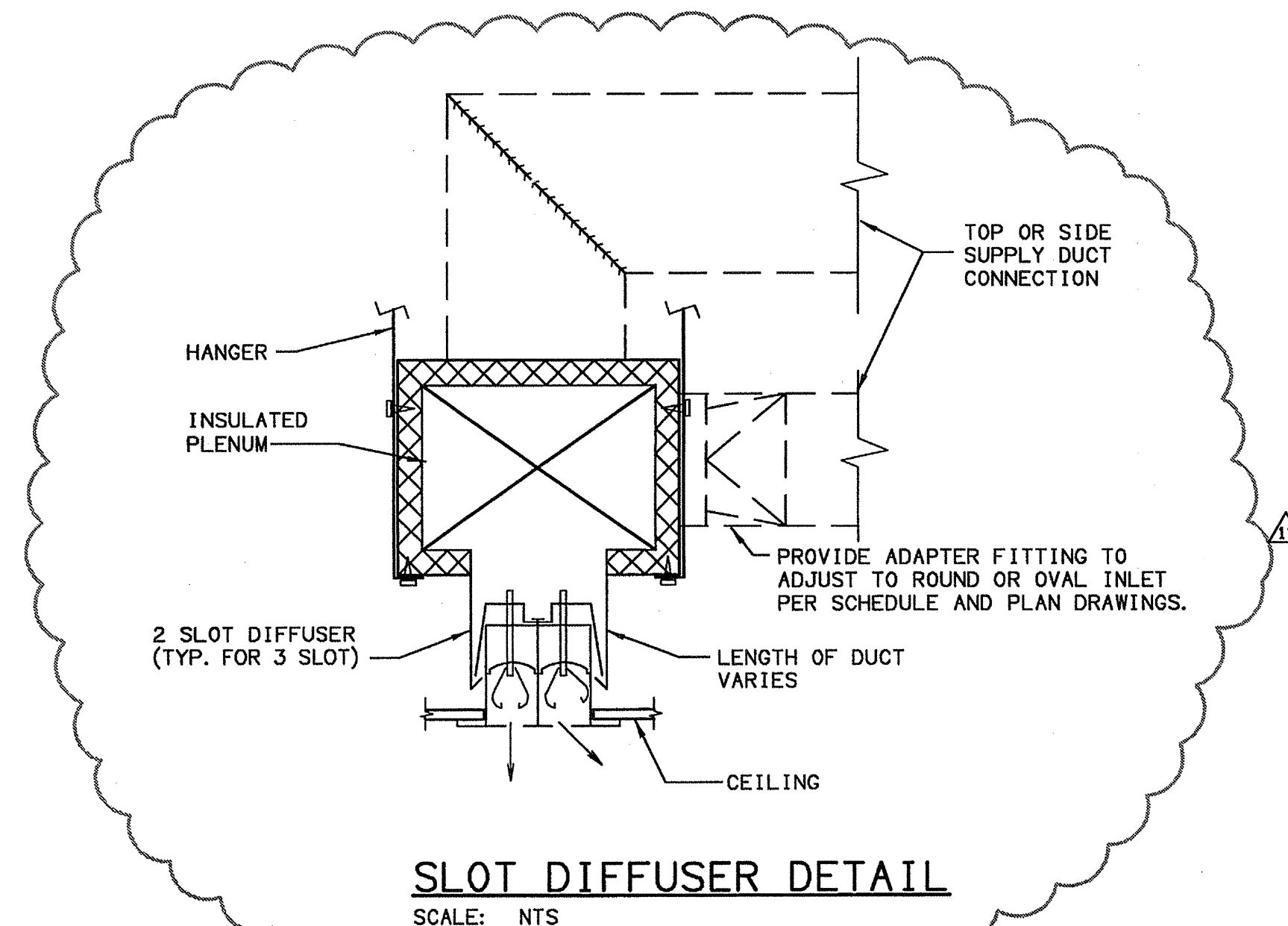
ELECTRIC HEATER SCHEDULE									
MARK	MANUFACTURER & MODEL	TYPE	KW	ELECTRIC VOLTS	PHASE	WIDTH	DEPTH	REMARKS	
CH-1	Q-MARK CWH2208	FLUSH WALL MOUNT	2	208	1	12"	4"	1 THRU 6	
CH-2	Q-MARK WHT500	WALL MOUNT	.5	120	1	21"	3.5"	1 THRU 4	
CH-3	Q-MARK MUH03-61	UNIT MOUNT HEATER	5	208	1	14"	7.5"	1 THRU 4	
CH-4	ALLSTYLE AMBE-3	CEILING MOUNT	3	208	1	47"	11.5"	1 THRU 4	
CH-P	Q-MARK MUH03	UNIT HEATER	3	208	1	-	-	1 THRU 4	

REMARKS:
1. PROVIDE SINGLE POINT ELECTRICAL CONNECTION.
2. PROVIDE UNIT MOUNTED DISCONNECT.
3. PROVIDE UNIT MOUNTED THERMOSTAT SET FOR 50°F.
4. HEATER SHALL BE UL LISTED.
5. HEAVY DUTY CONSTRUCTION WITH 16 GAUGE STEEL FRONT COVER.
6. PROVIDE WITH SURFACE MOUNTING FRAME.

FAN SCHEDULE											
MARK	MANUFACTURER TYPE & MODEL	CFM	E. S. P.	DRIVE	ELECTRICAL WATTS	HP	VOLT/ PHASE	MOUNTING	MAXIMUM SONES ALLOWED	SERVES	REMARKS
EF-1	NOTONE 695	50	.3	DIRECT	-	1/71	115/1	WALL	5	LIVING UNIT RESTROOMS	1, 2, 3, 4
EF-M1	NOTONE Q1300	450	.25	DIRECT	168	0	120/1	CEILING	5	PARKING MAINTENANCE	1, 2, 3, 4

1. PROVIDE WITH UNIT MOUNTED DISCONNECT.
2. PROVIDE WITH WHITE OR OFF-WHITE CEILING GRILLE.
3. CONTROL WITH ROOM LIGHTS.
4. PROVIDE WITH BACKDRAFT DAMPER.
5. PROVIDE WITH SOLID STATE SPEED CONTROL.
6. PROVIDE WITH THERMOSTAT.

7. PROVIDE WITH HANGING KIT AND RUBBER ISOLATORS.
8. PROVIDE WITH RADIATION DAMPER FROM FACTORY.
9. PROVIDE WITH MOTION SENSOR.

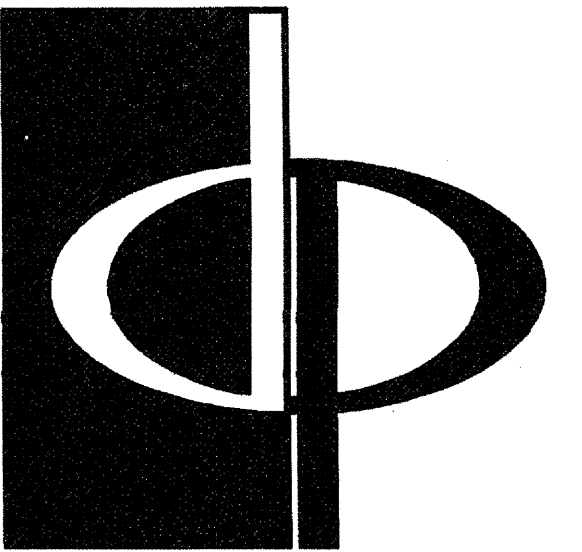


PACKAGED TERMINAL AIR CONDITIONER SCHEDULE	
MARK	PTAC-1
UNIT COOLING CAPACITY (BTU/HR)	8800
UNIT HEATING CAPACITY (BTU/HR)	9100
SUPPLY AIR (CFM)	260
OUTSIDE AIR (CFM)	N/A
HEATER (KW)	3.5
EEER	9.0
SLEEVE SIZE (D X W X H) INCHES	17 X 27 X 17
VOLT / PHASE	208/1
MANUFACTURER	FRIEDRICH
MODEL	WE09A33D
REMARKS	1 THRU 4

REMARKS:
1. PROVIDE WITH CORD AND PLUG.
2. PROVIDE WITH WALL SLEEVE, AND EXTERNAL DRAIN KIT FOR DRAINING THROUGH WALL.
3. PROVIDE WITH FLUSH MOUNT ARCHITECTURAL LOUVER.
4. RATINGS ARE AT ARI CONDITIONS.

APARTMENT GRILLE AND REGISTER SCHEDULE						
MARK	DESCRIPTION	ODB	MOUNTING	COLOR	MATERIAL	REMARKS
◇	TWO-WAY STAMPED FACE SUPPLY	Y	WALL	WHITE	STEEL	1, 3, 4, 5, 7
◇	ONE-WAY STAMPED FACE SUPPLY	Y	WALL	WHITE	STEEL	1, 3, 4, 5, 6, 7
◇	CURVED BLADE STAMPED FACE SUPPLY	Y	CEILING	WHITE	STEEL	1, 2, 3, 4
◇	STAMPED FACE FLOOR SUPPLY	Y	FLOOR	CONSULT ARCHITECT	STEEL	1, 3, 4
◇	LOUVERED BLADE RETURN	N	WALL	CONSULT ARCHITECT	STEEL	1, 3, 4, 5

1. SEE HVAC PLANS FOR NECK SIZES AND CFMS.
2. 4-WAY UNLESS NOTED OTHERWISE ON PLAN BY ARROWS.
3. MAXIMUM PRESSURE DROP OF .04 IN. WC.
4. TRANSITION ROUND FLEXIBLE OR RECTANGULAR RIGID DUCTWORK TO AIR DEVICES AS REQUIRED.
5. HORIZONTAL DIMENSION GIVEN FIRST.
6. ADJUSTABLE VERTICAL BLADE REGISTER MAY BE SUBSTITUTED IF ONE-WAY CANNOT BE FOUND.
7. USE ONLY REGISTERS SPECIFICALLY MADE FOR SIDEWALL APPLICATION.



THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM

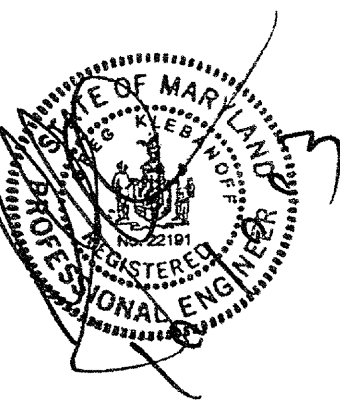
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WWW.THEPRESTONPARTNERSHIP.COM

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REAL



I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER: 0548 EXPIRATION DATE: SEPTEMBER 1, 2008.

PROJECT

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KENTLANDS

MARYLAND

FOR

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404-237-9292

REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION
07/18/03 RELEASED FOR CONSTRUCTION
09/15/03 AMENITY AREA REVISION

DATE 06/10/02

JOB NUMBER 021108

DRAWN BY GJK

CHECKED BY GJK

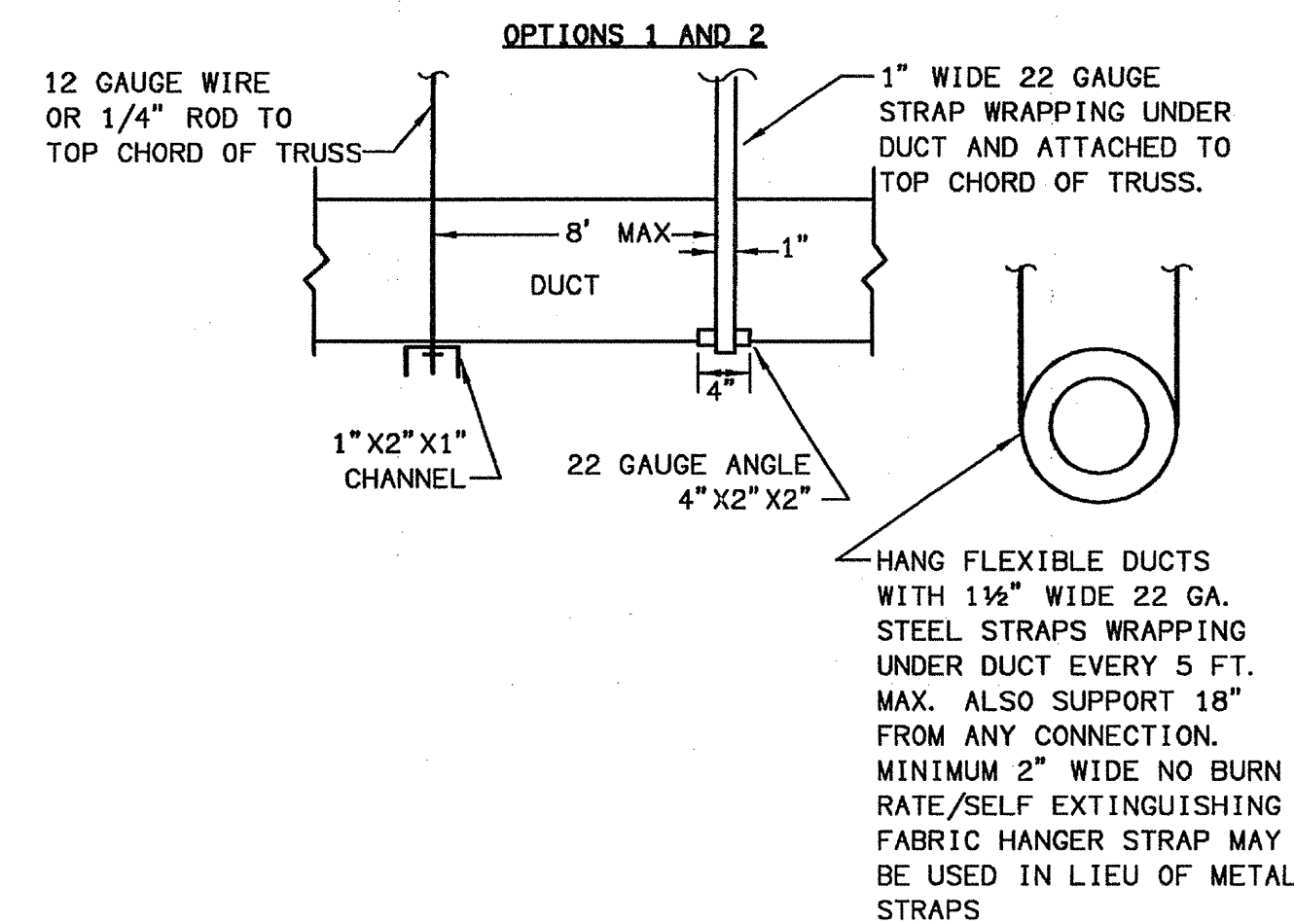
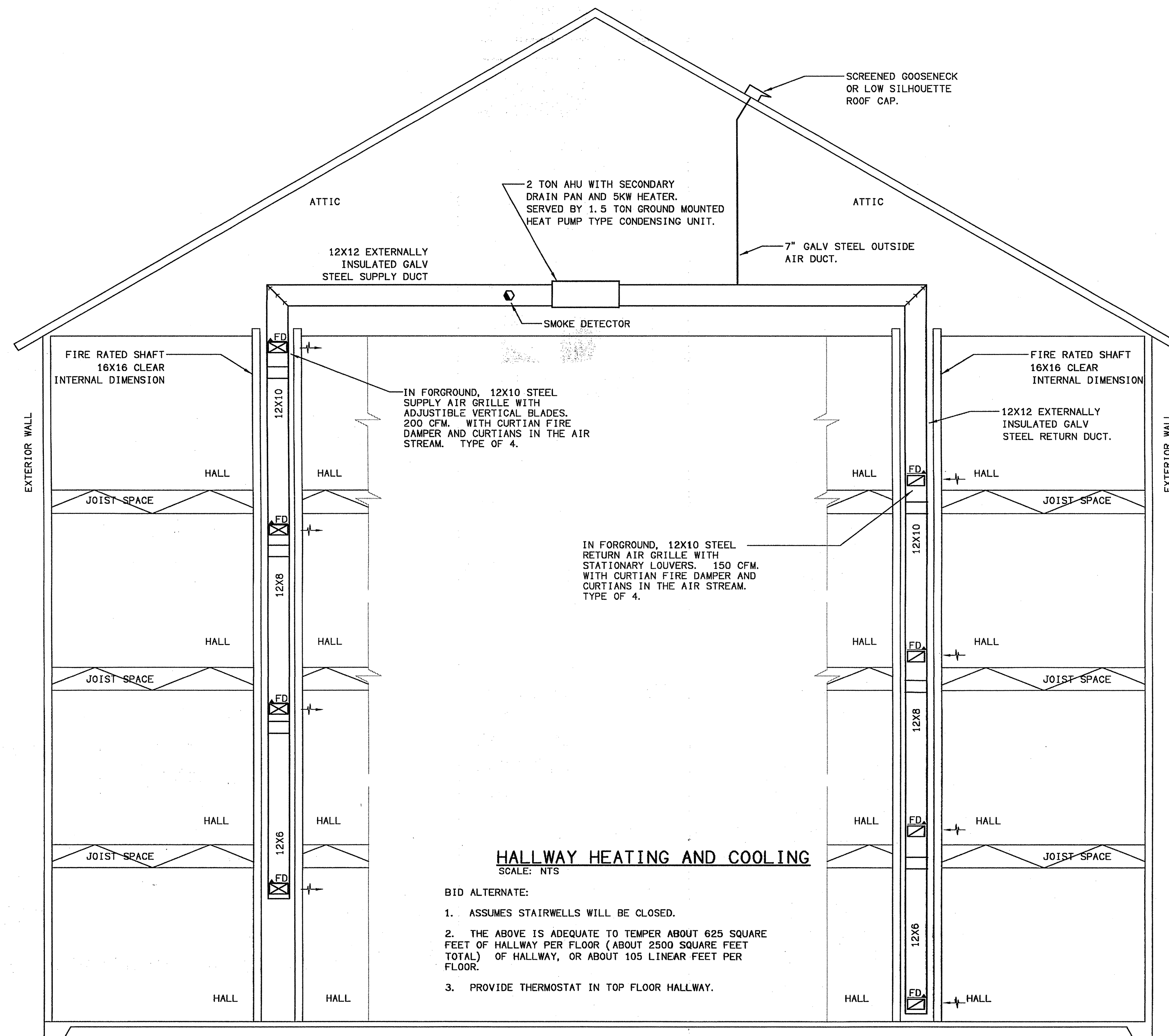
DRAWING TITLE

HVAC SCHEDULES AND DETAILS

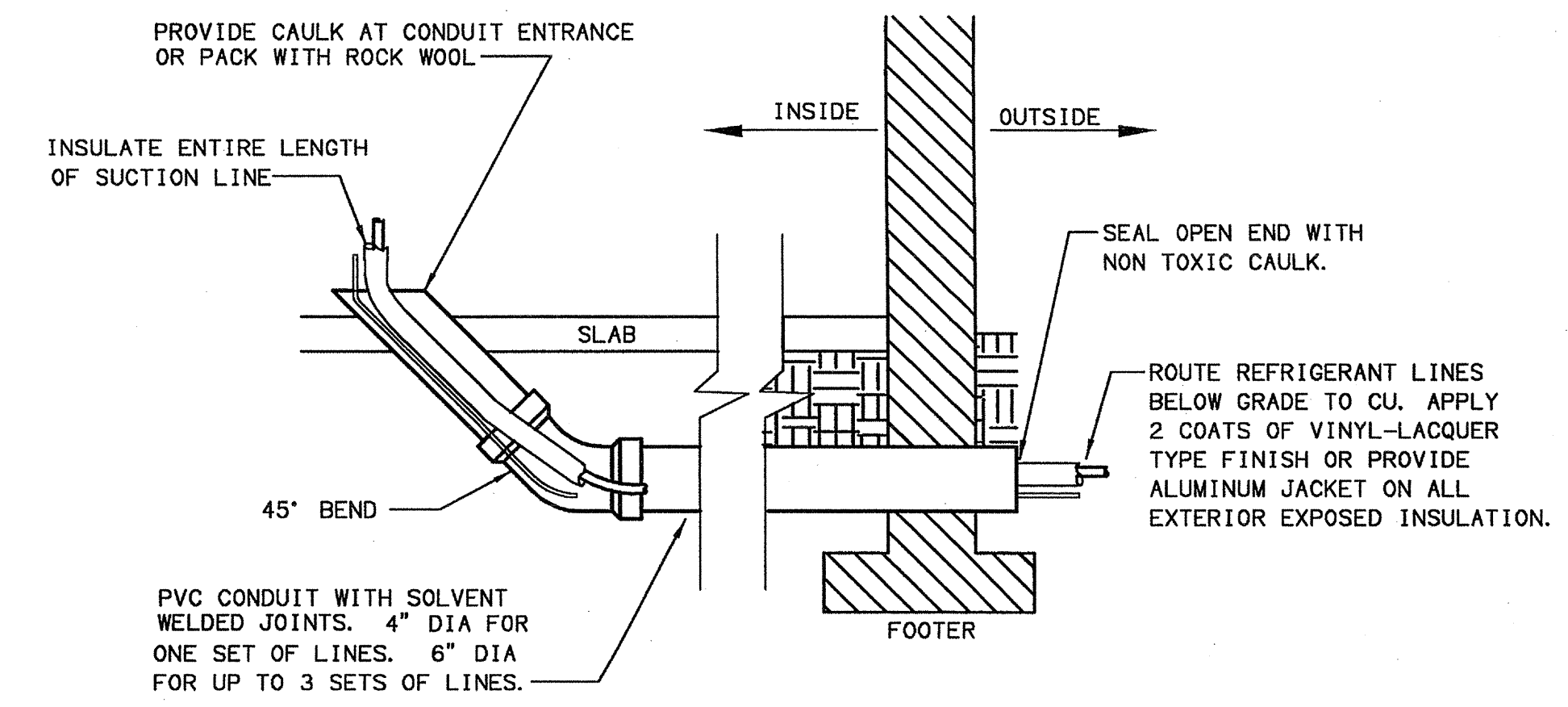
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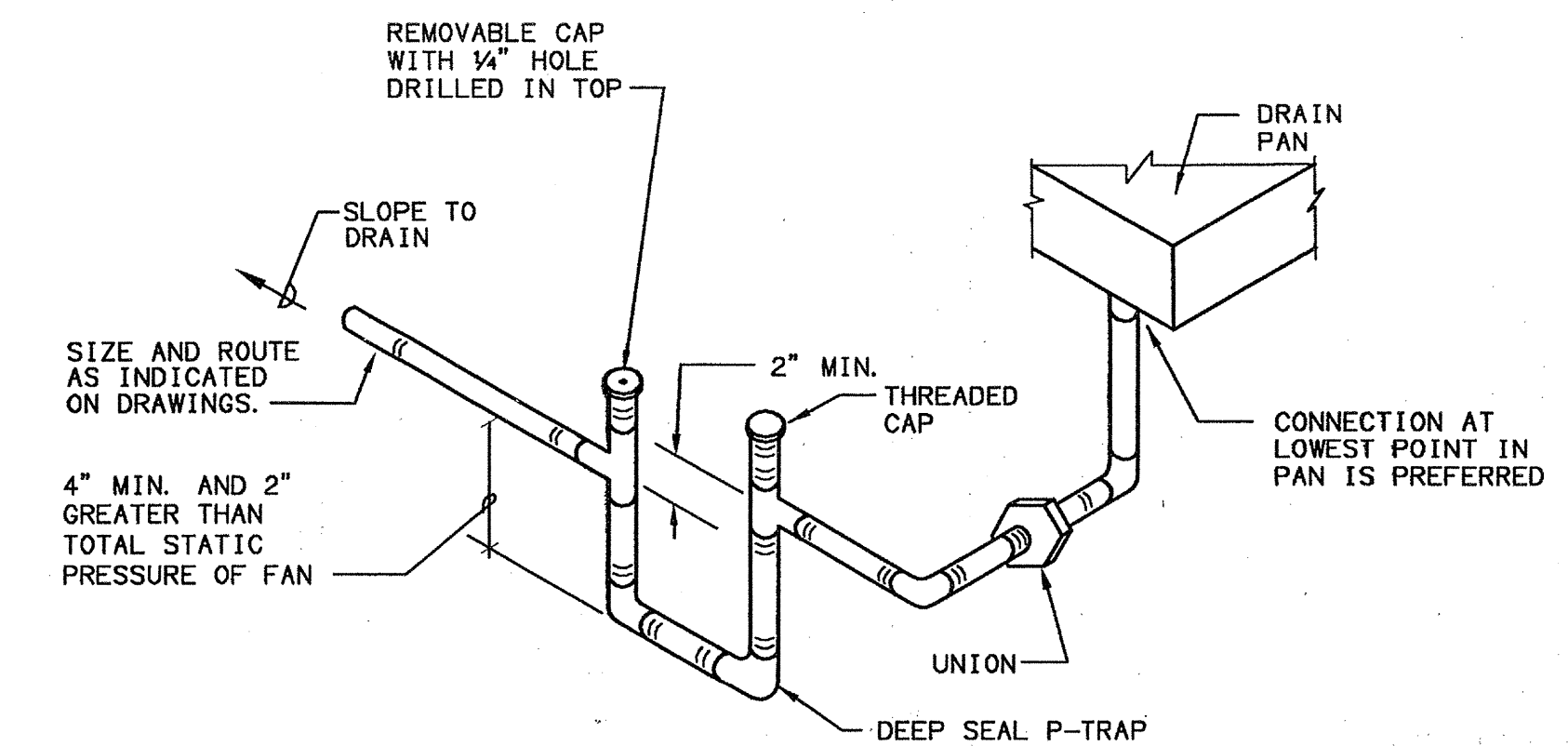
COMMENTS



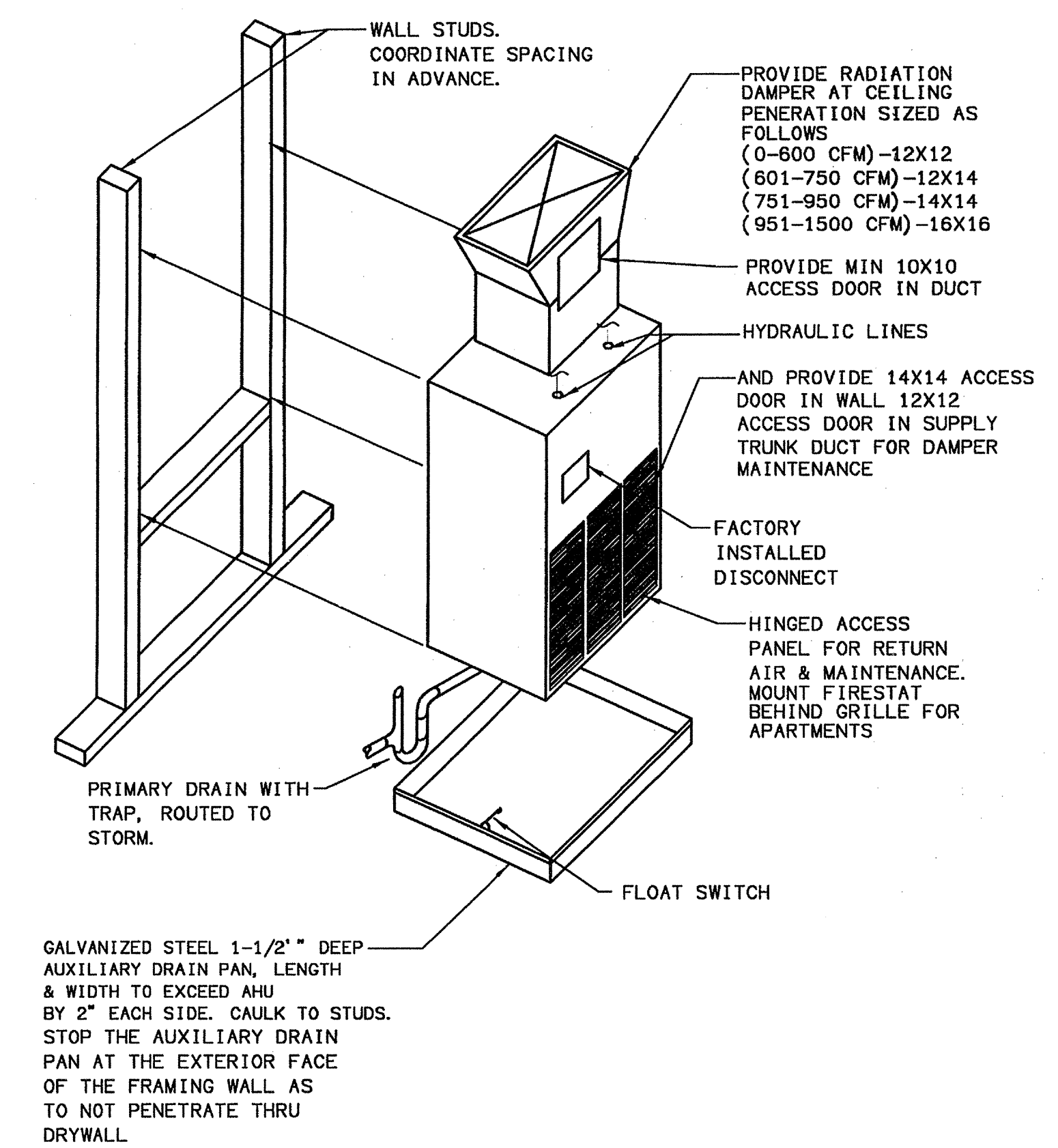
ATTIC DUCT SUPPORT DETAILS
SCALE: NTS



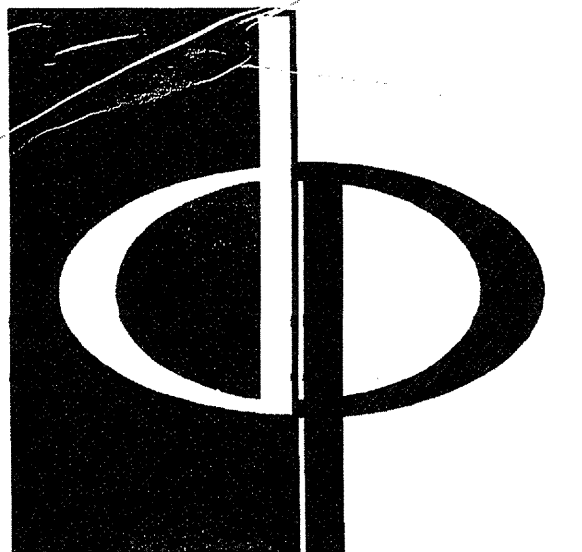
UNDERGROUND REFRIGERANT LINES
NTS



CONDENSATE TRAP DETAIL
SCALE: NTS



WALL MOUNT AHU DETAIL
SCALE: NTS

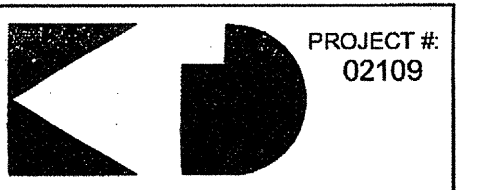


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REVISIONS

07/18/03 RELEASED FOR CONSTRUCTION

DATE 06/10/02

JOB NUMBER 021108

DRAWN BY GHK

CHECKED BY GHK

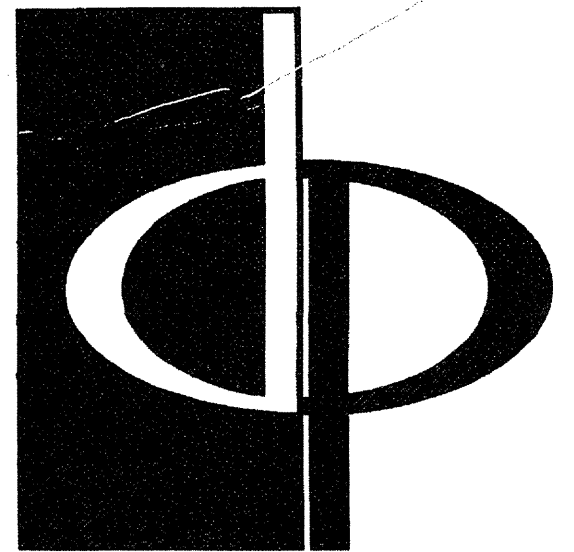
DRAWING TITLE GHK

HVAC SCHEDULES AND DETAILS

DRAWING NUMBER

H-6.3

COMMENTS

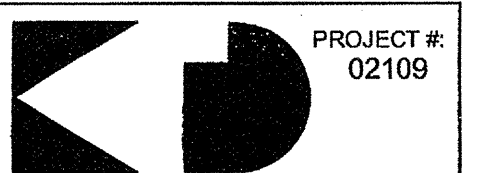


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PROJECT

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MARYLAND

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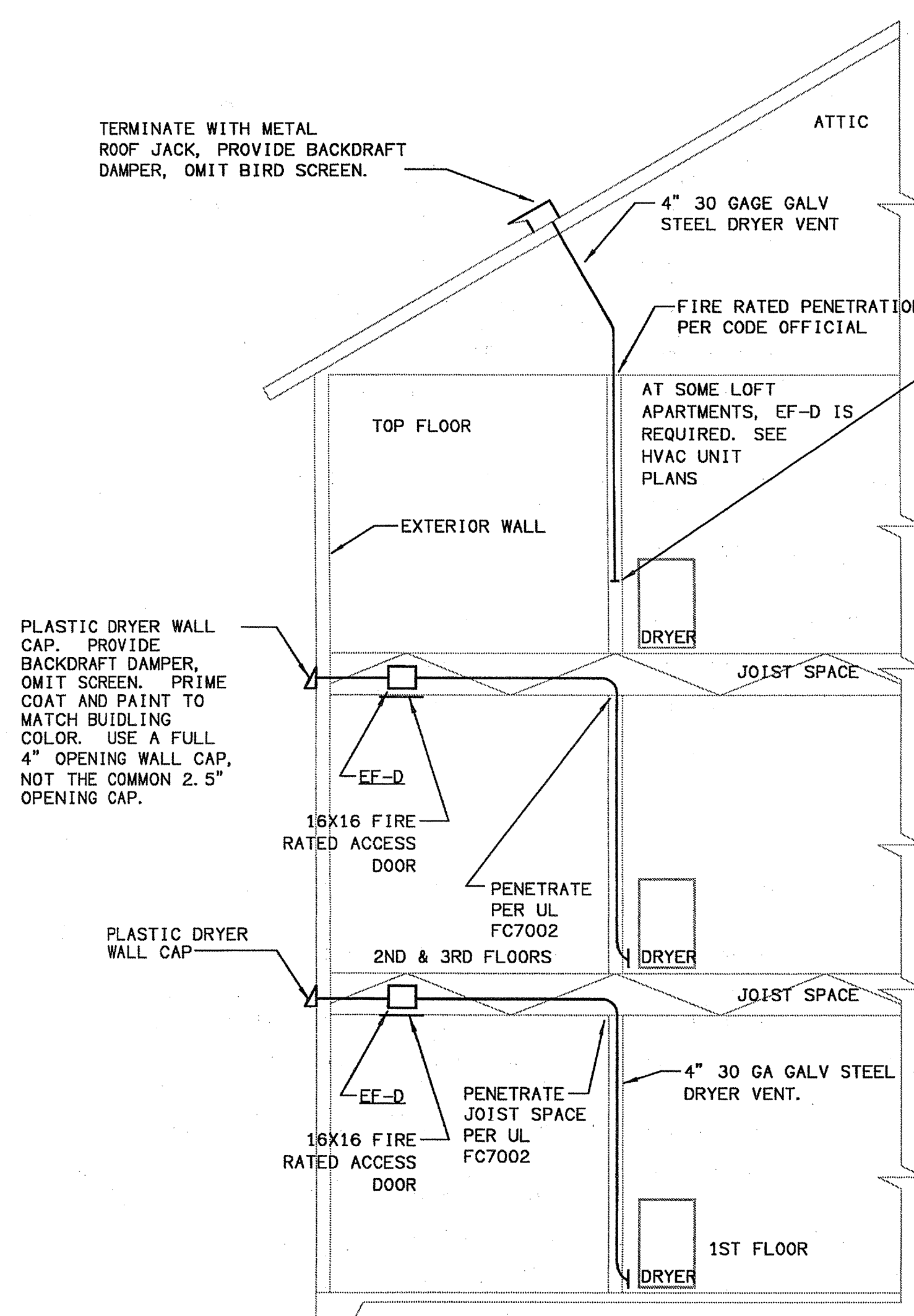
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404-237-9292

REVISIONS
07/18/03 RELEASED FOR CONSTRUCTION

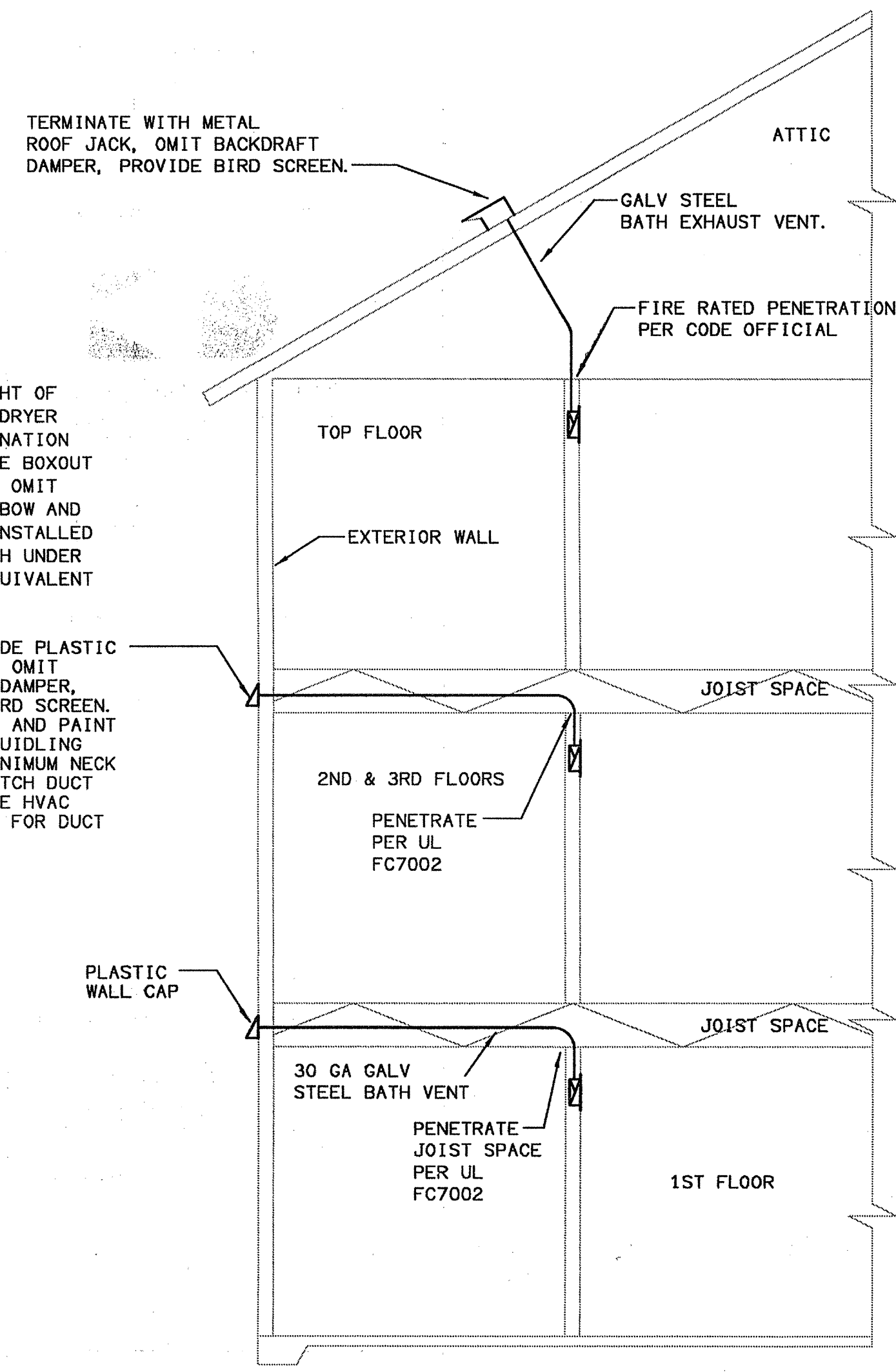
DATE 06/10/02
JOB NUMBER 021102
DRAWN BY GHK
CHECKED BY GHK
DRAWING TITLE HVAC SCHEDULES AND DETAILS

DRAWING NUMBER H-6.4

CONSENTS

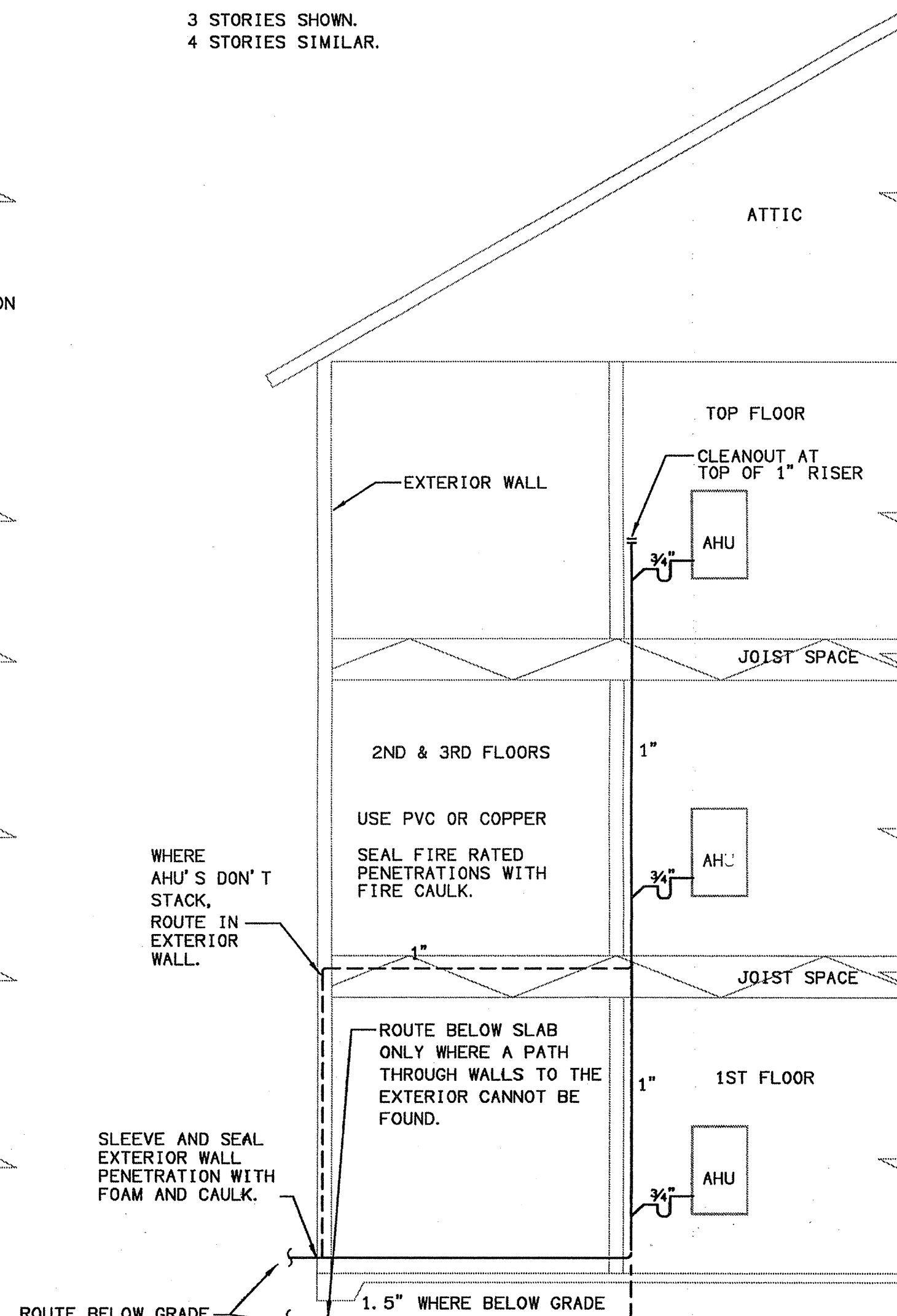


DRYER VENTING DETAIL
SCALE: NTS

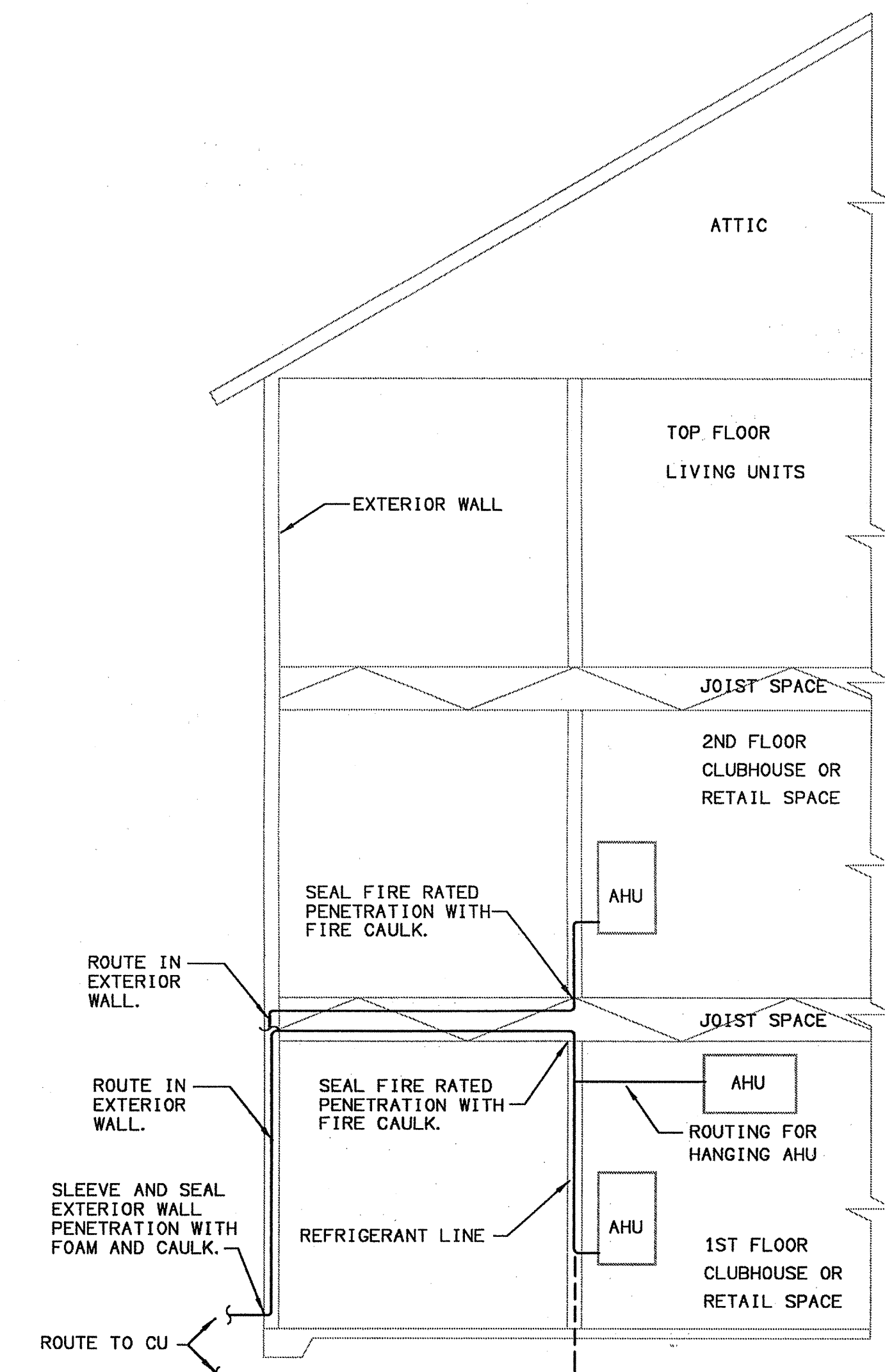


BATH EXHAUST VENTING DETAIL
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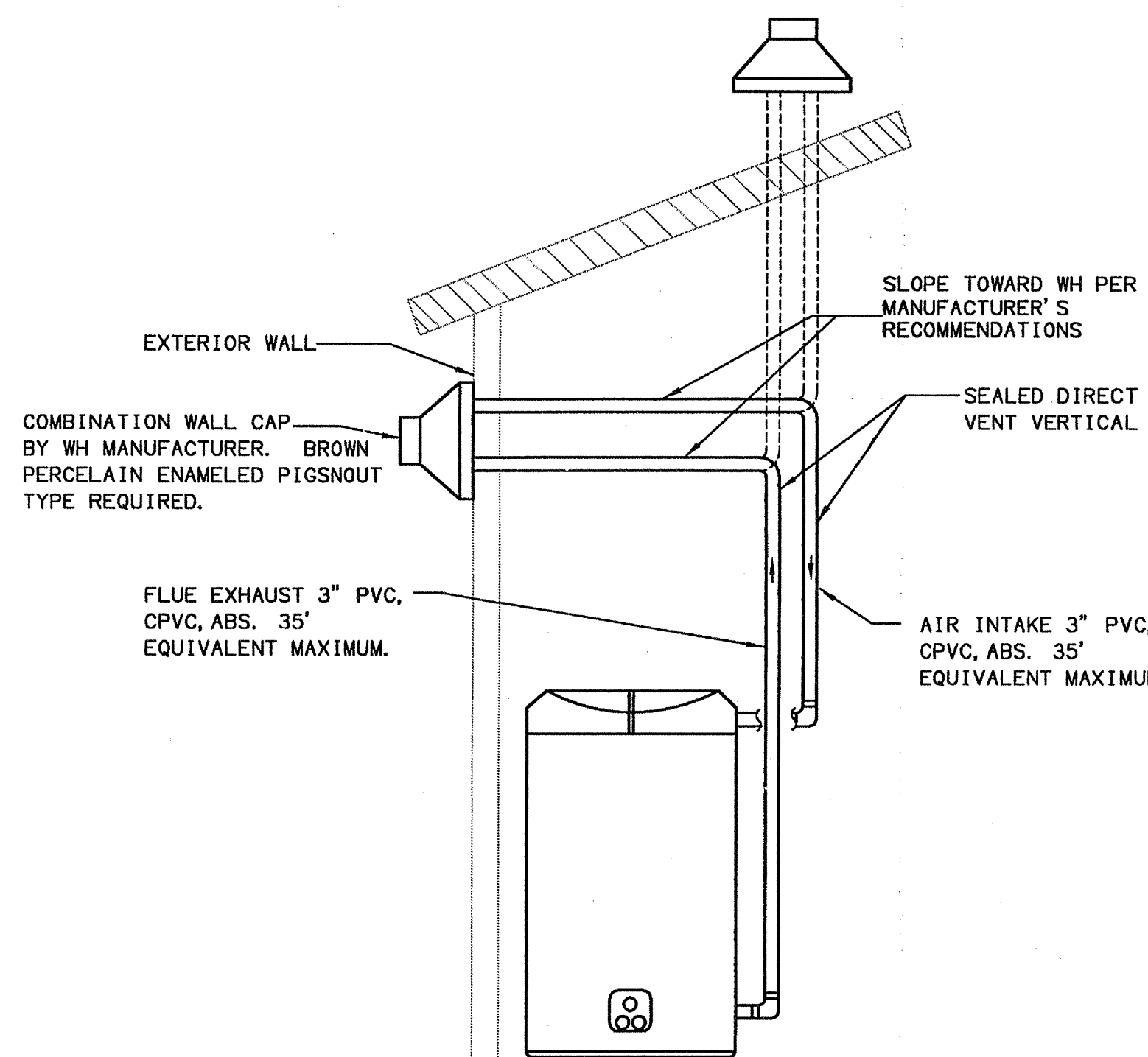
3 STORIES SHOWN.
4 STORIES SIMILAR.



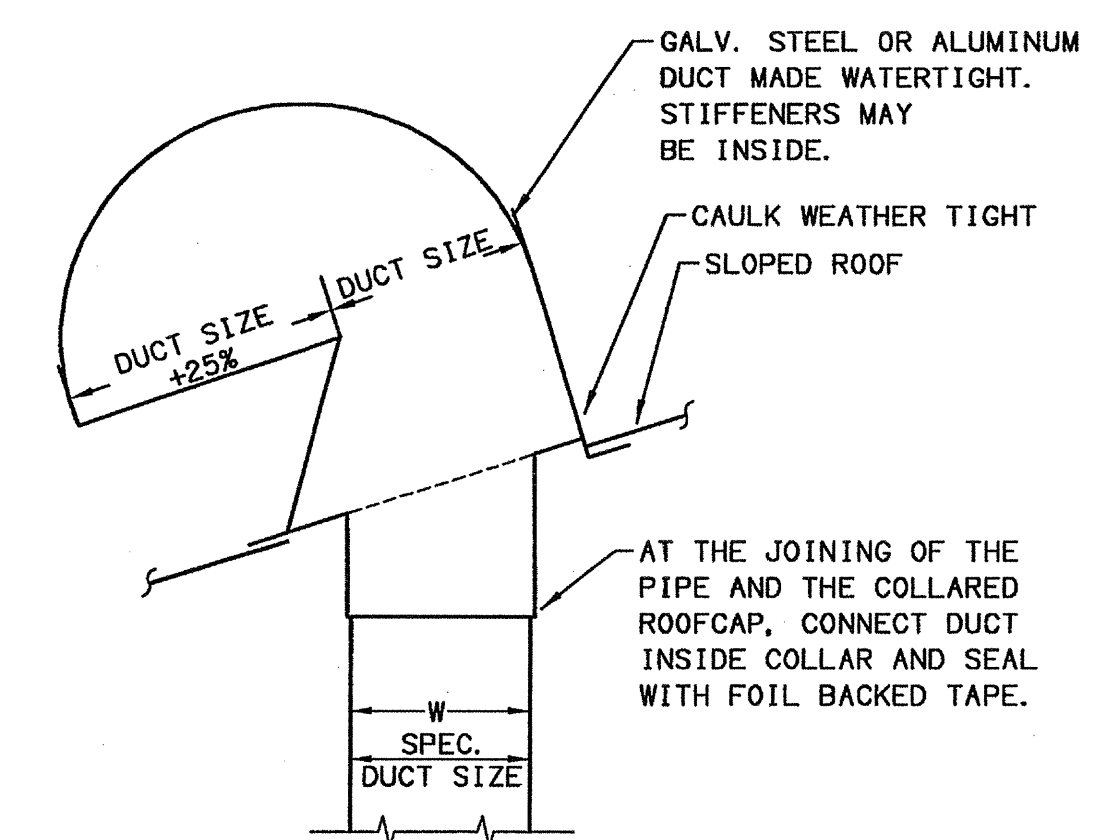
CONDENSATE ROUTING DETAIL
SCALE: NTS



GROUND MOUNT CU REFRIGERANT ROUTING DETAIL
SCALE: NTS



GAS HEATER VENTING
SCALE: NTS



- NOTES:
1. PRIME COAT AND PAINT TO MATCH ROOF COLOR.
 2. PROVIDE FLASHING AND COUNTER FLASHING.
 3. PROVIDE INSECT SCREEN AND OMIT BACKDRAFT DAMPER FOR BATH EXHAUST USE.
 4. PROVIDE BACKDRAFT DAMPER AND OMIT INSECT SCREEN FOR DRYER EXHAUST USE.
 5. OUTSIDE AIR INTAKE SHALL BE A MINIMUM OF 10 FT. AWAY FROM ANY EXHAUST OR PLUMBING VENT.

EXHAUST ROOF CAP DETAIL
SCALE: N. T. S.

